St. Luke's
UNIVERSITY HEALTH NETWORK

2025

Rural West Community Health Needs Assessment

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Rural West Service Area

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St. Luke's and Star Community Health Partner Quote (Key Informant/Community Forum Attendee)

St. Luke's and Star Community Health Community Health Needs Assessment Data

Executive Summary

From our analysis of primary and secondary data, including the Community Health Needs Assessment (CHNA) key informant interviews, community forums, and work with our community partners, we see significant issues facing our communities that impede health and wellbeing. Our efforts in prevention, care transformation, research, and partnerships help support our work to advance sustainable health promotion and quality of life initiatives. While there are many issues that need to be addressed, the results from the 2025 CHNA found the top priorities for the St. Luke's University Health Network include:

2025 Community Health Needs Assessment
Top Priority Outcomes
Access to Care
Workforce Development
Food Insecurity
Obesity Reduction
Physical Activity Promotion
Mental Health
Opioids and Other Substance Use
Housing
Transportation

The needs discussed within the health categories outlined in this document will serve as our guide in creating a detailed network implementation plan to best address the needs of the St. Luke's University Health Network service areas using three pillars:

Wellness and Prevention	Care Transformation	Research and Partnerships

We will work collaboratively with our community and network partners to create pathways for better health outcomes and address gaps in care, especially among our most vulnerable populations such as our Hispanic communities, unhoused individuals and families, veterans, seniors, women, and children.

Introduction

Background

As part of the Patient Protection and Affordable Care Act, nonprofit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years to maintain tax-exempt status under section 501(c)(3) of the Internal Revenue Code. The goal of the assessment is to identify critical health disparities faced by populations within St. Luke's University Health Network (SLUHN) service area. The assessments state health priorities unveiled by community stakeholders, health professionals, and public health experts. Additionally, regional reports and implementation plans will be crafted to build and strengthen collaborative partnerships to determine the allocation of resources to address the specified health needs. To view our 2022 and 2025 CHNA reports and Annual Reports, please refer to the following link: https://www.slhn.org/community-health/community-health-needs-assessment. If you have any questions regarding these reports, please contact the Department of Community Health at (484) 526-2100.

Methodology

The CHNA is comprised of both primary and secondary data. The primary data were collected through three methods. First, key informant interviews were conducted with leaders from each campus community to identify high level strengths and needs in their respective communities. A list of the interview questions can be found in Appendix A. Second, a community forum was held for each campus community with stakeholders invited to speak on behalf of those they serve. A list of organizations represented at the forum can be found in Appendix B. Quotes from key informants and community forum participants are reported throughout the assessment identified using the legend on page five. Key informant interviews were conducted through Microsoft Teams or in-person, and the community forums were conducted in person at SLUHN campuses throughout the service area. Third, 15,148 voluntary CHNA surveys were collected from adults 18 years and older throughout our fifteen campus geographic region to help establish the main priority health needs with 1,529 respondents in the Rural West (Carbon Campus, Lehighton Campus, Miners Campus) service area. Snowball sampling was utilized to reach respondents, especially those represented in our vulnerable populations. Snowball sampling is most effective when used to reach vulnerable populations to help to shed light on the social determinants of health (SDOH) within hard-to-reach populations. To reach populations with diverse resources, surveys were completed in either paper or digital format. The survey findings document, also posted online, includes questions and responses recorded from CHNA surveys conducted in 2012, 2016, 2019, 2022, and 2025. Secondary data included the use of hospital network data as well as county, state, and national data obtained from numerous sources (e.g., U.S. Census, the University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, Vital Statistics, American Community Survey (ACS), U.S. Department of Labor, Behavioral Risk Factor Surveillance System). A resource list of all data sources can be found in Appendix C. Data were accessed directly from the resource, or through the ArcGIS (geographic information system) software Esri (Environmental Systems Research Institute). The software provides mapping and spatial analysis to help visualize, analyze, and interpret data to understand patterns, relationships, and trends. Finally, the needs identified in the interviews and community forums were supplemented by the survey and secondary data to provide a comprehensive picture of the contributing factors and needs in the community.

Existing Community Assets

The St. Luke's Department of Community Health prioritizes health initiatives and goals for each fiscal year in a strategic plan. These initiatives and goals are in place to help respond to the needs identified in the most recent assessment and addressing social determinants of health to improve health outcomes. The strategies St. Luke's uses to reach these goals are through prevention, care transformation, and research and partnerships. Our initiatives and goals for the 2022 CHNA addressed access to care, chronic disease, and mental and behavioral health.

To address the access to care health priority, St. Luke's partners with Head Start. Head Start is a federally funded program designed to promote school readiness for children from low-income families. It serves children from birth to age five and supports their cognitive, social, and emotional development. Department of Community Health staff, cross trained as Community Health Workers (CHW), provide connection to care services to students and families at PathStone Head Start in Carbon County and Child Development Head Start in Schuylkill County.

St. Luke's University Health Network (SLUHN) school-based staff provide services to students and families in the Panther Valley School District (PVSD) and CHWs help support programs and initiatives at Carbon County School Districts. St. Luke's staff also help to implement a food pantry for PVSD families facing food insecurity. In collaboration with the St. Luke's Rural Health Centers and with support from CHWs, connections to care were established to improve access to school physicals, vaccinations, education, and resources. The Department of Community Health, in partnership with Star Community Health, provided dental van services to eleven local schools during Fiscal Year 2024 (FY24). The dental van provided services to 555 patients, including 452 sealants and 119 restorations. In Schuylkill County, the dental van visits Tamaqua Elementary, West Penn Elementary School, and Tamaqua Middle School. The Carbon County schools the dental van visits are Panther Valley Elementary, Intermediate, and High School, SS Palmer Elementary School, Weatherly Elementary School, Behavioral Health Associates (BHA), as well as visits to PathStone Lehighton Head Start. Priorities in PVSD aligned with the Community School Model to connect students and their families to a medical home, vision, dental, behavioral health services, and other social services. During FY24, through the Mobile Youth Health Centers, 73 unique students were provided care and services through 73 encounters and consistent connection to care with school-based coordinators.

In partnership with Community Health and Second Harvest Food Bank, PVSD opened a monthly school-based community food pantry that supports up to 450 households per month. The Panther Valley Community Food Pantry was held monthly at Panther Valley Elementary and parent outreach services were provided at the pantry. St. Luke's Rural Health Centers (RHC) food access partnership was implemented in Tamaqua to improve patient intake of fresh produce. During FY24, 132 households were able to benefit from this 12-week program. Additionally, SLUHN staff supported the PVSD Summer Meals program, which served a total of 42,502 breakfasts and 42,502 lunches from June-August 2024 to support families in need of food security during the summer months.

St. Luke's promotes literacy in Carbon County through the evidence-based Reach Out and Read (ROR) program in partnership with Carbon County Community Foundation. ROR is integrated into our Carbon County pediatric and family medicine practices to engage families during each well patient visit. In addition, Brush, Book, Bed (BBB), an American Academy of Pediatrics initiative to engage families on the importance of a regular bedtime routine, is integrated to promote oral health, literacy, and healthy lifestyles and behaviors. The Dolly Parton Imagination Library initiative, also funded by the Carbon County Community Foundation, further supports literacy and provides age-appropriate books for all Carbon County children enrolled.

St. Luke's partners with findhelp, a free self-navigating online platform (sluhn.findhelp.com). Findhelp is a social care network established to provide a comprehensive platform for people to find social services in their communities and for nonprofit and other community-based organizations to coordinate their service delivery. St. Luke's Information Technology, Quality, Case Management, and Community Health teams work collaboratively, especially with Star Community Health, with 1,246 established (i.e., claimed) community-based partners. Findhelp allows community members to search for and connect to social determinants of health (SDOH) support such as financial assistance, food pantries, medical care, transportation, and more. During FY24, there were 30,227 searches on findhelp, with the top searches including food, housing, and utilities. This platform, as well as United Way's 211, are tools that Community Health Liaisons use to assist our community members, patients, and staff to connect to vital resources.

St. Luke's Community Health partners with the Carbon County Interagency Collaborative to provide consistent communication and support. More than 100 Carbon County social service organizations and nonprofit partners are represented, with over 35 regularly contributing to collaborative meetings. The committee identifies gaps, barriers, and opportunities and prioritizes how to best align existing services and strengthen connections to care, education, and resources. Additionally, several subcommittees and initiatives are established to build capacity for key community needs (e.g., transportation, literacy, early childhood education, prevention efforts, homeless task force).

Within the chronic disease health priority, St. Luke's promotes healthy lifestyles and education to prevent chronic disease by increasing physical activity and fruit and vegetable consumption. This includes Get Your Tail on the Trail, which is a partnership with the Delaware & Lehigh Corridor (D & L) to encourage overall physical activity among community residents in order to promote enjoyment of nature and reduce obesity rates. School and community-based food security efforts, including school pantries and mobile markets, helped to provide healthy food to families in need.

The Older Adult Meals Program is designed to provide subsidized meals to adults 65 and older at the Carbon Campus cafeteria, which served 6,101 meals during FY24. This initiative addresses food security and loneliness among older adults. During FY24, a total of 3,270 meals were served as part of this program at the Miners Campus.

SLUHN's smoking cessation program provides services with certified tobacco treatment specialists, physicians, and/or advanced practitioners for individuals currently using tobacco and interested in quitting. During FY24, 324 SLUHN patients received treatment for nicotine/tobacco, a 17% increase from FY23. St. Luke's received a Comprehensive Center of Excellence accreditation from the Smoking Treatment Accreditation & Recognition (STAR) team, a program funded by the PA Department of Health and managed by the Health Promotion Council. STAR's mission is to facilitate the integration of tobacco dependence treatment into existing health care workflows and to recognize organizations whose smoking cessation services exceed exceptional standards.

In the mental and behavioral health priority, St. Luke's focused on employee mental health by providing online cognitive behavioral therapy to employees and their spouses. During the 2023-24 school year, the YESS! School-based therapy program supported 29,696 student visits for students with therapy and mental health needs or who sought services throughout the SLUHN Network, including Panther Valley, Weatherly, and Palmerton school districts in the Rural West region. The Adolescent Behavioral Health Unit at the Easton Campus provided services for 572 patients throughout the SLUHN service areas during FY24.

Many of St. Luke's campuses participated in both the spring and fall "Take Back Days" in Fiscal Year (FY) 2024 and collected 2,340 pounds of unwanted medications. To further improve harm reduction, St. Luke's Miners, Carbon, and Lehighton campuses installed a permanent drug take back box. In response to opioid use disorder and substance use disorders the Sacred Heart Campus has a detox unit with eighteen beds. St. Luke's was awarded a Health Resource Service Administration (HRSA) Rural Community Psychostimulant Response Program (RCORP) grant in 2022 to work within a consortium to improve prevention, treatment, and recovery response. St. Luke's Naloxone initiatives provided eleven educational session and distributed 141 boxes of Naloxone in the rural region during 2023.

St. Luke's Psychiatric Associates' behavioral health walk-in center is located at the Lehighton Campus. It offers a welcoming, comfortable, non-residential environment for those dealing with a variety of mental health issues. Individuals seeking services or support for a non-life-threatening mental health circumstance will be evaluated and provided with the resources and/or referrals needed to deal with the immediate situation. This may include psychotherapy sessions or connections to other community resources (e.g., Veterans Affairs) and specialists. A case manager may be assigned to provide ongoing support.

St. Luke's Penn Foundation Mental Health provides educational lectures series, videos, and podcasts during the year on topics such as *Recognizing Signs and Symptoms of Childhood Anxiety and Depression and Interventions that Parents Can Use.* St. Luke's "Just STARt the Conversation: a dialogue on mental health" podcast is available throughout the community to discuss timely topics in mental health. Over 30 episodes discuss topics ranging from *Dealing With A Loved One's Addiction as a Family* to *Youth Sports and Mental Health*. St. Luke's Wellness 101 show is fun and educational, and the short video series is designed to help students 12 + and adults thrive (with over 100 episodes). Wellness 101 Junior is for children ages 6-12 with 30 episodes to choose from that range in topics from sleep to how to ask for help.

············County Health Rankings and Roadmaps············

Every year the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation releases County Health Rankings and Roadmaps (CHR&R) data that compare counties to state averages, as well as U.S. top performers. There are twenty indicators evaluated for each county with the US top performers being the counties at the 90th percentile for the nation. SLUHN uses CHR&R to better understand the Network top priorities from a county perspective, which promotes our understanding of resource needs within the eleven counties we serve.

Indicators are color-coded using a stoplight approach, in which green indicates that the value is better than both state and U.S. top performers, yellow indicates that the value is in between state and U.S. top performers, and red indicates that the value is at or worse than both state and U.S. top performers. Data reported in 2024 indicates that of the 220 values, 55.9% are red (123), 25.9% are yellow (57), and 18.2% are green (40). In 2021, 60% of values were red (108), 21% were yellow (38), and 19% were green (34). From 2021 to 2024, there was a 6.8% decrease in red values, a 21.2% increase in yellow values, and a 4.3% decrease in green values.

Additionally, in Carbon county, there are 75% red values, 20% yellow values, and 5% green values. In 2021, there were 75% red values, 20% yellow values, and 5% green values. From 2021 to 2024, there was no change in red, yellow, and green values. In Schuylkill county, there are 75% red values, 25% yellow values, and 0% green values. In 2021, there were 75% red values, 20% yellow values, and 5% green values. From 2021 to 2024, there was no change in red values, a 25% increase in yellow values, and a 100% decrease in green values. Out of all St. Luke's counties with a hospital campus (not including Berks, Luzerne, Montgomery) Schuylkill County has the least amount of green values (zero). Carbon County is close to Schuylkill County with only one green value.

*The CHR&R reports findings as the year 2024, but many of the measures are reported from previous years. Please see https://www.countyhealthrankings.org/ for more information.

2024	U.S. Top Performers*	Pennsylvania (PA)	Berks (BR) County	Bucks (BU) County, PA	Carbon (CR) County, PA	Lehigh (LH) County, PA	Monroe (MO) County, PA	Montgomery (MT) County, PA	Northampton (NO) County, PA	Schuylkill (SC) County, PA	Luzerne County, PA	New Jersey (NJ)	Hunterdon County, NJ	Warren (WA) County, NJ
Unemployment	2.3%	4.4%	4.3%	3.8%	5.1%	4.4%	5.7%	3.5%	4.2%	5.0%	5.3%	3.7%	2.9%	3.5%
Uninsured	6%	7%	8%	5%	6%	8%	7%	5%	6%	7%	8%	8%	5%	7%
Primary care physicians	1,030:1	1,260:1	1,590:1	1,240:1	2,970:1	1,040:1	2,490:1	770:1	1,240:1	1,990:1	1,320:1	1,280:1	910:1	1,850:1
Dentists	1,180:1	1,400:1	1,790:1	1,140:1	2,420:1	1,140:1	2,700:1	930:1	1,690:1	2,020:1	1,530:1	1,160:1	1,190:1	1,400:1
Poor physical health days	3.1	3.4	3.7	2.9	3.9	3.4	3.6	3.0	3.3	3.8	3.9	3.2	2.7	3.5
Food environment index	8.9	8.5	8.6	9.1	8.3	8.4	8.5	9.2	8.7	8.3	7.9	9	9.6	8.5
Physical inactivity	20%	23%	25%	21%	27%	26%	25%	20%	23%	27%	28%	23%	18%	23%
Access to exercise opportunities	90%	86%	86%	92%	65%	85%	77%	97%	90%	75%	88%	96%	91%	90%
Adult obesity	32%	33%	36%	31%	36%	34%	33%	31%	32%	39%	37%	28%	28%	32%
Excessive drinking	13%	19%	17%	19%	17%	19%	16%	19%	19%	18%	17%	17%	20%	18%
Adult smoking	14%	15%	18%	15%	20%	17%	17%	13%	16%	21%	20%	11%	11%	14%
Poor mental health days	4.4	4.7	5	4.9	5.5	4.8	4.6	4.7	4.8	4.9	5.1	4.4	4.4	5.2
Mental health providers	230:1	370:1	560:1	330:1	1,280:1	420:1	660:1	230:1	360:1	970:1	750:1	340:1	350:1	390:1
Low birthweight	6%	8%	8%	7%	8%	8%	9%	7%	8%	9%	8%	8%	6%	8%
Teen births	9	13	18	5	15	17	8	6	9	19	20	10	2	7
Sexually transmitted infections	151.7	409.8	468.4	214.5	192.6	467.3	354.5	223.7	331.6	264.5	392.0	360.7	121.6	247.4
High school graduation	94%	87%	87%	93%	88%	86%	92%	89%	88%	91%	85%	89%	94%	89%
Children in poverty	10%	15%	14%	7%	16%	16%	16%	7%	14%	16%	21%	13%	4%	10%
Severe housing problems	8%	14%	13%	13%	14%	16%	16%	13%	13%	11%	13%	20%	12%	13%
Social associations	18	11.8	10.7	8	13.3	9.9	7.2	10.7	9.8	12.9	10.3	8.1	9.5	8.7

	KEY	At or above State/Top Performer	Between Top Performers and State	At or below State/Top Performer

University of Wisconsin Population Health Institute.
County Health Rankings and Roadmaps. 2024.

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Rural West Service Area

Demographics

General Population

For the purposes of the CHNA, we define the top zip codes as those that account for 80% of the population served by the Miners, Lehighton, and Carbon campuses (i.e., Rural West) service area. In the Rural West service area, 38% of the patients served reside in 18235 (Lehighton), 18252 (Tamaqua), and 18071 (Palmerton). The campus service area is defined by the area covered by the top zip codes. According to the ArcGIS (geographic information system) software Esri (Environmental Systems Research Institute), a total of 151,188 people live in the 602.31 square mile area outlined as the Rural West service area. The population density for this area is estimated at 201.01 persons per square mile.

When looking at population, we also assess the percentage of the population living in urban and rural areas. According to the 2020 Decennial Census, 51.6% of the Rural West service area lives in an urban setting and 48.4% of the service area lives in a rural setting. Urban areas are defined by population density, count, size thresholds and the amount of impervious surface or development (i.e., areas impervious to water seeping into the ground, concrete-heavy areas). Rural areas are all other areas not defined as urban. The Pennsylvania percentages for urban and rural living are 75.9% and 24.1%, respectively. The United States urban and rural percentages are 78.8% and 21.2%, respectively.

FY23 SLCA & SLL & SLM - Zip Codes Comprising Top 80% of Facility Encounters		
Zip Code	% SLCA/SLL/SLM Total (n = 269,772)	% Network Total (n = 2,133,822)
18235	17%	2.1%
18252	13%	1.6%
18071	8%	1.0%
18229	8%	1.0%
18232	6%	0.7%
18240	4%	0.6%
18250	3%	0.4%
18218	3%	0.4%
18210	3%	0.4%
18058	2%	0.3%
18080	2%	0.3%
17948	2%	0.3%
17960	2%	0.2%
18088	2%	0.2%
18201	2%	0.2%
18214	2%	0.2%
18255	1%	0.2%
Total	80%	10.2%

Understanding the demographics of the service area is essential to addressing need and improving upon the region's health services. The following data come from American Community Survey (ACS) 5-year estimates (2018-2022) reported in 2023 by the US Census Bureau and St. Luke's Community Health Needs Assessment (CHNA) survey data unless stated otherwise. Esri was used to access the ACS and US Census data. ACS data represents information over a 60-month period, which allows estimates to provide data for a wide range of demographic and social determinants of health for the United States population. For more information on ACS 5-year data please visit www.census.gov/data/developers/data-sets.

The US Census (2020) reports that 20.3% of the Rural West service area population are under 18 years old and 19.6% are 65 years and older. Combined, these groups account for 39.9% of the service area population, leaving 60.1% between the ages of 18 and 64 years old with a median age of 44 years old. In Carbon County, 18.8% of people are under 18 years old, 20.4% are aged 65 and older, and 60.8% between the ages of 18 and 64 years old. In Schuylkill County, 19.9% of people are under 18 years old, 21.3% are aged 65 and older, and 58.8% between the ages of 18 and 64 years old, indicating that the population is aging and the birth rate is decreasing, which is similar to trends seen throughout the nation.

Total Population by Age, Rural West

Age Group	Percentage
Age 0 to 4	5.1%
Age 5 to 9	5.5%
Age 10 to 14	6.1%
Age 15 to 19	5.8%
Age 20 to 29	10.8%
Age 30 to 39	12.1%
Age 40 to 49	12.1%
Age 50 to 59	15.1%
Age 60 to 64	7.8%
Age 65+	19.6%
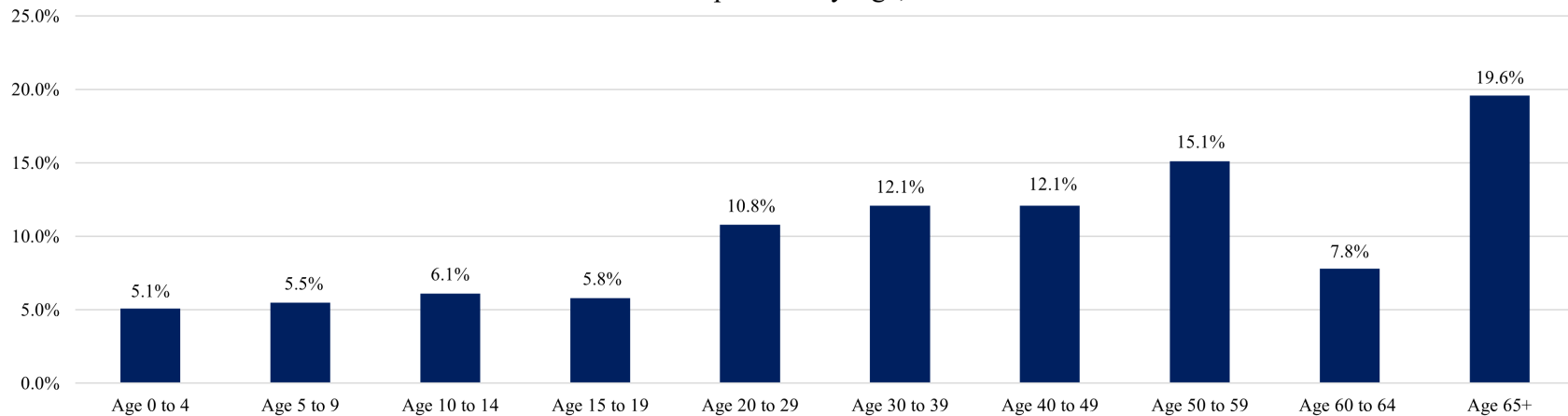
When compared to the Census distribution, survey respondents in the Rural West service area were more likely to be ages 65 and older (47.0%) followed by 55-64 years old (20.5%), 45-54 years old (13.6%), 35-44 years old (8.8%), 25-34 years old (8.2%) and 1.9% were ages 18-24 years old. The survey assessed individuals 18 years and older, therefore ages under 18 years old are not reflected in survey results. The mean age of all respondents was 57.4 years old.

2025 CHNA Survey Results by Age, Rural West Service Area

Age Group	Percentage
Age 18-24	1.9%
Age 25-34	8.2%
Age 35-44	8.8%
Age 45-54	13.6%
Age 55-64	20.5%
Age 65+	47.0%

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Rural West Service Area
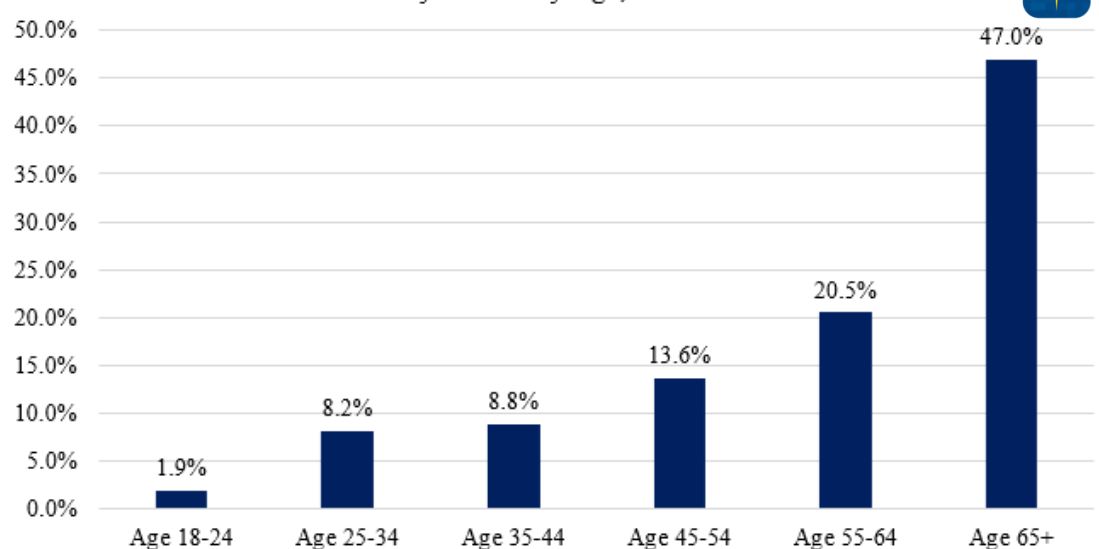
Sex at Birth

The 2022 ACS 5 year estimates asked respondents to indicate their sex (i.e., male, female) assigned at birth. Pennsylvania has two options for d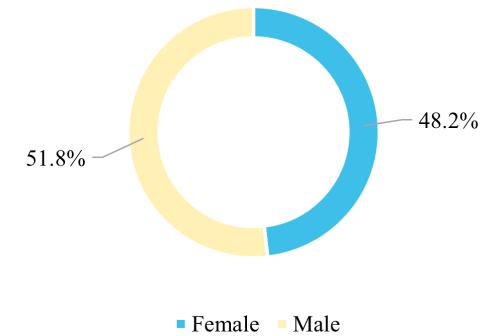esignations on birth certificates (i.e., male, female). Generally, the population of all SLUHN service area communities are evenly split between men and women, with women as a slightly higher percentage of the population. According to the ACS, 48.2% of people identified as female and 51.8% identified as male in the Rural West service area. This is similar to the national average of 50.5% female and 49.5% male. In Carbon County, 49.8% of people identify as female and 50.2% as male. In Schuylkill County, 48.5% of people identify as female and 51.5% as male.
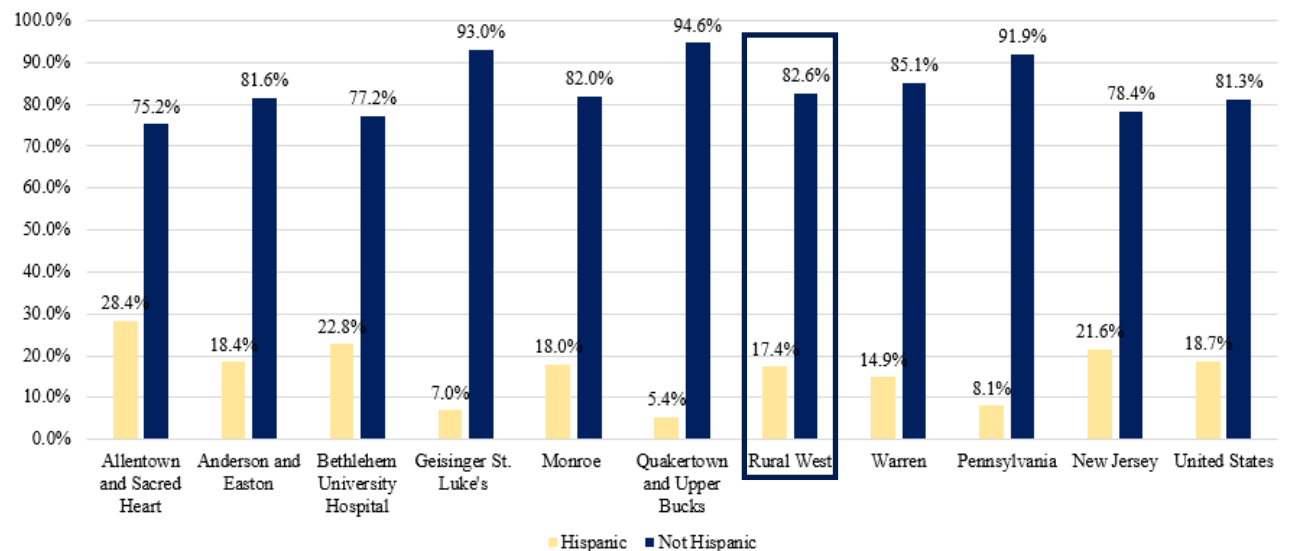
Of the CHNA survey respondents in the Rural West service area, 68.0% were assigned female at birth compared to 32.0% assigned male at birth. For each campus, most survey respondents were assigned female at birth, which is on par with U.S. Census Bureau findings. However, the percentage of female survey respondents is 16.2% percent points higher for the Rural West service area. Further information related to gender identification is found in the LGBT+ section.

Total Population by Sex, Rural West

48.2%

51.8%

■ Female ■ Male

Ethnicity

Ethnicity trends in the United States have been evolving rapidly, reflecting the country's increasing diversity. Nationwide, Hispanic and Asian populations are among the fastest-growing groups as a result of both immigration and higher birth rates. These trends are also seen in Pennsylvania and in local communities within the SLUHN service areas.

The 2022 ACS data indicates that 82.6% of the Rural West service area identifies as non-Hispanic and 17.4% identifies as Hispanic. The population in Pennsylvania is 91.9% non-Hispanic and 8.1% Hispanic. In Carbon County, 92.6% of people identify as non-Hispanic and 7.4% as Hispanic. In Schuylkill County, 91.4% of people identify as non-Hispanic and 8.6% as Hispanic. When asked about ethnicity, 94.9% of survey respondents from the Rural West service area identify as non-Hispanic, while 5.1% of respondents identify as Hispanic.

St. Luke's Service Area Distribution by Ethnicity
2022 ACS 5 Year Detailed Summary

Location	Hispanic	Not Hispanic
Allentown and Sacred Heart	28.4%	75.2%
Anderson and Easton	18.4%	81.6%
Bethlehem University Hospital	22.8%	77.2%
Geisinger St. Luke's	7.0%	93.0%
Monroe	18.0%	82.0%
Quakertown and Upper Bucks	5.4%	94.6%
Rural West	17.4%	82.6%
Warren	14.9%	85.1%
Pennsylvania	8.1%	91.9%
New Jersey	21.6%	78.4%
United States	18.7%	81.3%

■ Hispanic ■ Not Hispanic

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Rural West Service Area

Racial demographic trends have shifted significantly in recent years. According to the US Census, nationwide, the number of individuals identifying as two or more races increased more than 276% between 2010 and 2020, and the Some Other Race increased 129%. Data for individuals identifying as Native Hawaiian/Pacific Islander, Native American/Alaska Native were combined into Other Race due to small sample sizes. These trends are also seen at the state level in Pennsylvania. The ACS reports that 81.6% of the Rural West service area identifies as White, followed by Black (4.1%), Other Race (13.9%), and Asian (0.4%).

The majority of Rural West service area CHNA survey respondents identified as White 92.4%, followed by Other Race (4.3%), Black (2.6%), and Asian (0.7%).

St. Luke's Service Area Distribution by Race
2022 ACS 5 Year Detailed Table Estimates
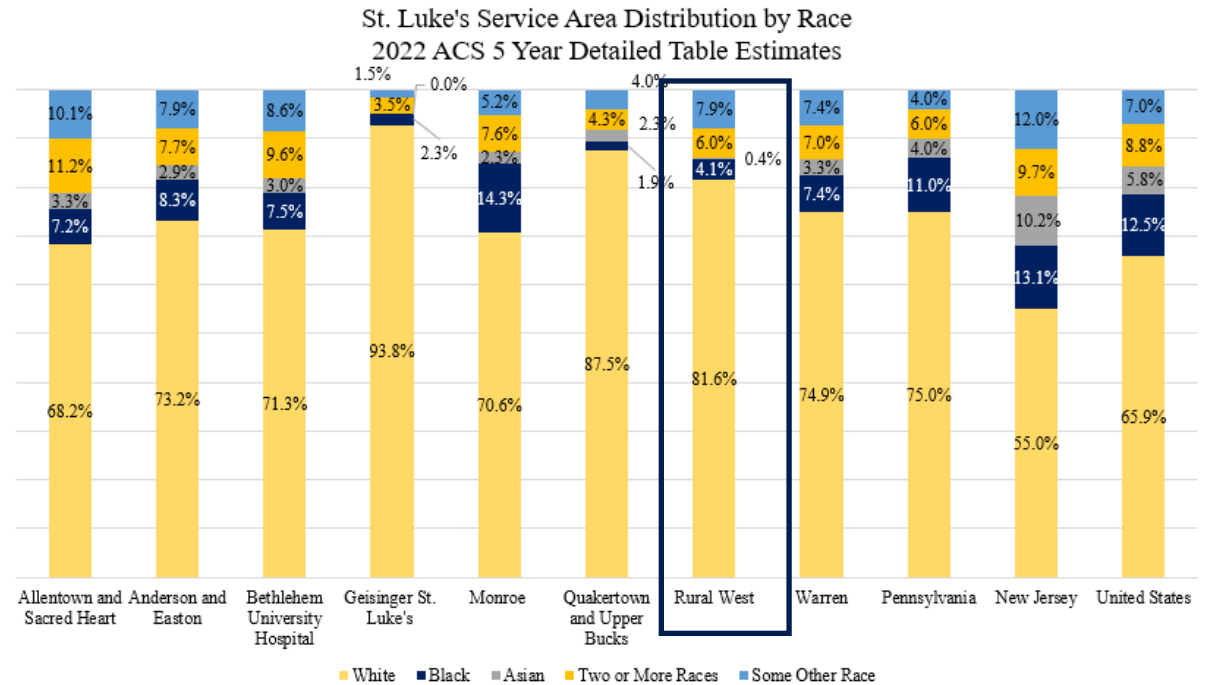
Total Population and CHNA Survey Respondents by Race, Rural West Service Area

Rural West Service Area

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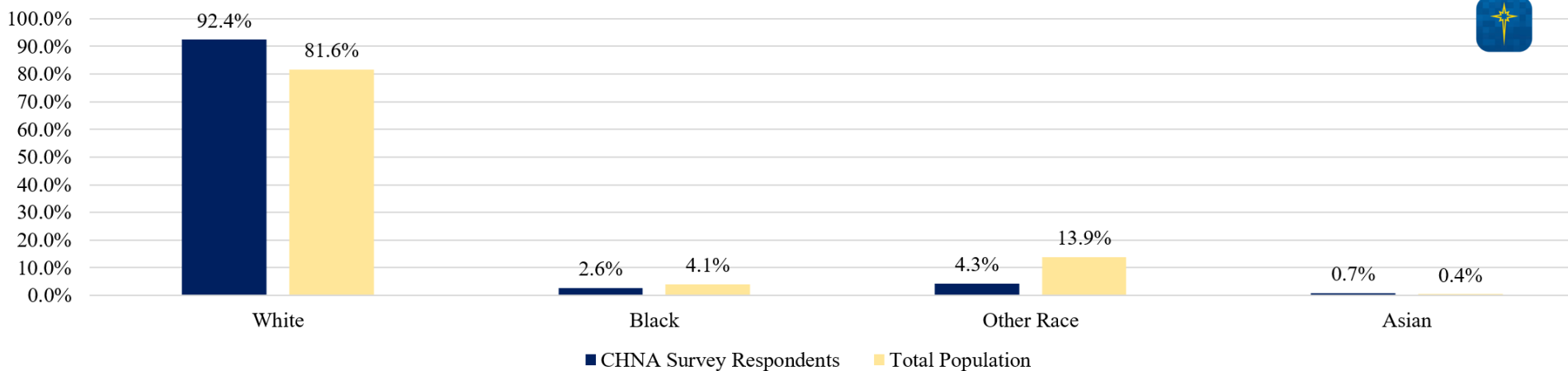
Vulnerable Populations

For the purpose of this CHNA, vulnerable populations are defined as a group or groups of individuals who experience greater obstacles and barriers to positive health outcomes and access to quality healthcare based on their economic status, racial or ethnic background, age, physical health status, mental health status, social support, geographical location, and other external factors that place them at risk of poor health outcomes. Vulnerable populations often face multiple obstacles that collectively contribute to limited access to consistent and quality care, which in turn correlates with disparities in health status due to external factors often out of the control of individuals. While these disparities are often addressed to promote a group or groups of vulnerable populations, it is important to note that many individuals face uniquely challenging circumstances that require support and services based on their personal situation. The following data was retrieved from the 5-year American Community Survey (2022), Esri estimates, and the US Census (2020) unless otherwise stated.

Black, Indigenous, People of Color (BIPOC)

It is important to identify the BIPOC communities within the SLUHN service area to understand the unique perspectives and experiences, which are often influenced by both historical and current inequalities. For example, Indigenous peoples historically lack proper access to health resources and information and often face discrimination when accessing healthcare facilities. Black women have the highest rates of death during childbirth of any demographic, and black men have some of the highest rates of Type 2 Diabetes in the nation. It is important to recognize the specific challenges faced by BIPOC communities, including SDOH (e.g., healthcare, education, employment, housing) in order to address needs and promote education, prevention, and quality care. Disparities in access to care for BIPOC communities can be detrimental to health outcomes and generate mistrust in healthcare. In the Rural West service area, 2.6% of survey respondents identify as Black and 5.1% of respondents identify as Hispanic. Out of the BIPOC individuals who were surveyed for the Network, 5.1% identified as Black, 1.4% identified as Asian, 6.17% as Other Race, and 9.3% Hispanic.

ALICE

Asset Limited, Income Constrained, Employed (ALICE) are individuals and households that earn above the Federal Poverty Level, but less than the basic cost of living. ALICE households do not qualify for federal assistance and they often struggle to afford basic necessities such as healthcare, housing, food, childcare, and transportation. ALICE individuals and households are typically employed, often working multiple jobs or in positions that do not make enough to earn a living wage. Because these individuals and households earn too much to qualify for public assistance, they struggle to not only obtain financial stability in the short term, but also have little-to-no savings or assets. The basic cost of living for ALICE populations is higher than what their incomes can support, and they are often one emergency (e.g., car repair, medical emergency) away from financial crisis. The Federal Poverty Level for a family of four (2024) is $31,200.

"The economy is certainly an issue— the homelessness, the housing market, and increasing prices. It is hard to work here and afford living here."

The United Way uses the Household Survival Budget to examine the bare minimum costs for essentials in a geographic area (i.e., city, county) to understand the variance in financial constraints for individuals and households living and working within a given community. The most recent ALICE report was published in 2023 and was updated in 2024. The most recent data indicates that financial hardships in Pennsylvania continued to be affected by the COVID-19 pandemic, inflation, wage growth, and the expiration of public assistance provided during the pandemic were considered ALICE. In Pennsylvania (2022), out of 5,279,632 households, there were 658,448 (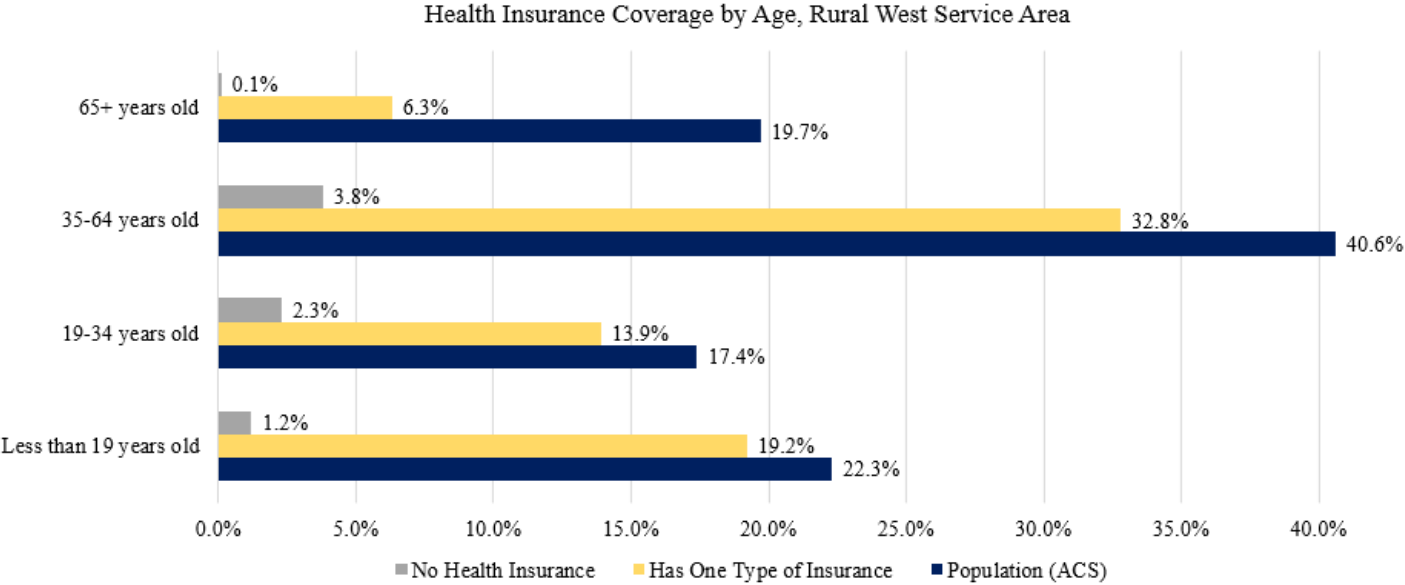12%) living in poverty and 1,493,199 (28%) that were ALICE, which equates to 2,151,647 (41%) living below the ALICE threshold. In Carbon County, 12% of households live in poverty and 34% are ALICE. Schuylkill County also has 12% of families living in poverty and 28% are considered ALICE.

Percent Below ALICE Threshold

29%   57%
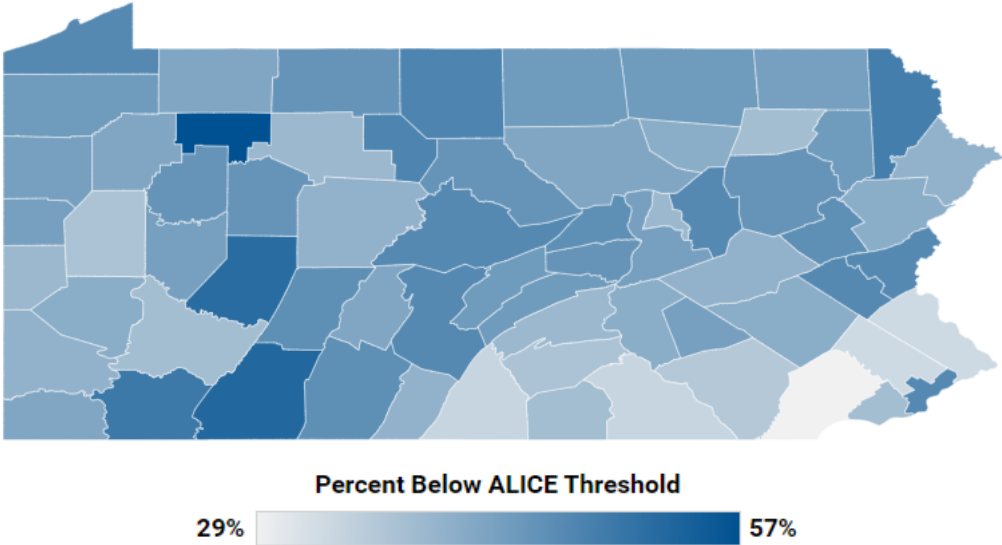
Reliable and affordable health insurance plays a vital role in ensuring that individuals and families have access to necessary medical services without overwhelming financial burden. Health insurance often covers the majority of the cost for preventative care, treatment of acute and chronic illness, and other specialty services. Access to health insurance also promotes public health, as insured populations are more likely to receive timely medical attention, vaccinations, and other care services that promote healthier communities and reduce long-term healthcare costs.

Health Insurance Coverage by Age, Rural West Service Area

Age	No Health Insurance	Has One Type of Insurance	Population (ACS)
65+ years old	0.1%	6.3%	19.7%
35-64 years old	3.8%	32.8%	40.6%
19-34 years old	2.3%	13.9%	17.4%
Less than 19 years old	1.2%	19.2%	22.3%

■ No Health Insurance   ■ Has One Type of Insurance   ■ Population (ACS)

Rural West Service Area

Federal programs for uninsured and underinsured individuals are available in the United States. Medicare is a federal healthcare program in the United States available to most of the population ages 65 years and older and helps to nearly eliminate the uninsured population in that age demographic. Children under the age of 18 years old are eligible for the Children's Health Insurance Program (CHIP) as part of a joint state and federal health insurance coverage for children in low-income families that earn above the Medicaid threshold but between 200-400% of the Federal Poverty Level, depending on state guidelines.

In the Rural West service area, 0.1% of the 65 and older population are uninsured, 6.1% of ages 19 to 64 are uninsured, and 1.2% of children under 19 years old are uninsured. According to CHNA survey results, 3.4% of Rural West service area respondents either have no coverage and pay cash or do not know if they have insurance. The discrepancy between this service area and CHNA survey respondents is important to note as we continue to increase our outreach efforts in the communities we serve to reach our most vulnerable populations, which includes the uninsured population.

Out of pocket health care expenditures can also be barriers to care and services. In the Rural West service area, average healthcare expenditures were $4,045 per person annually. These out of pocket expenses can include insurance payments (e.g., copays), vision care, dental care, and more.

Health Insurance Coverage (ACS, 2022), Rural West Service Area

Coverage Type	35-64 years old	19-34 years old
Direct Purchase Insurance	2.3%	0.8%
Employer Health Insurance	23.8%	9.1%
VA Health Care	0.1%	0.0%
Medicare Only	0.9%	0.1%
Medicaid Only	5.6%	3.7%
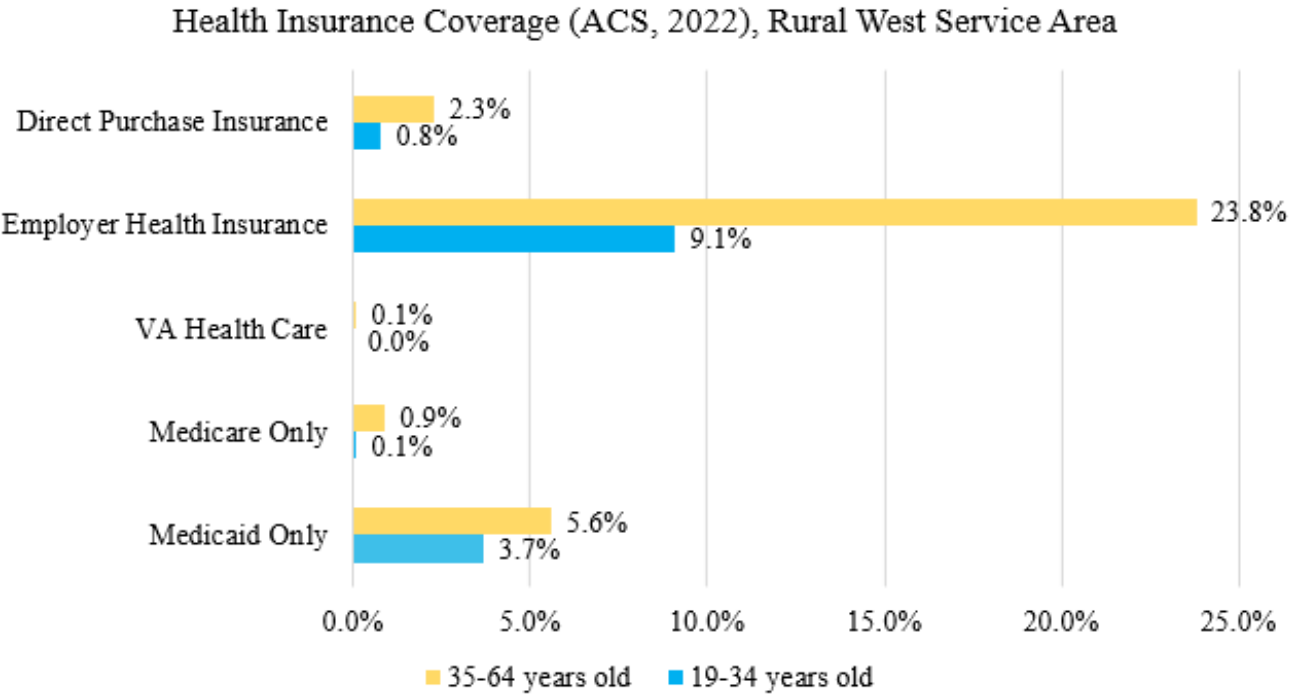
The life expectancy of older adults in the United States has rapidly increased in recent decades, requiring a greater need for elder care and older adult services. According to the 2020 U.S. Census, one in six people in the United States were ages 65 years and older (55.8 million individuals), which was a 38.6% increase from the previous Census in 2010. In the Rural West service area, there were 29,790 individuals 65 and older in 2020 (19.6% of the population). The 2024 projected estimates increased to 33,171 (21.5% of the population) and by 2029 estimates are projected to be 37,184 (24.0% of the population).

It is estimated that the 65 years and older population will outnumber the population under 18 years old by the year 2034. This is important as the demographics of the population shift, the needs of the population and the dependency of younger and older populations on the working-age population create diverse needs and responsibilities. Dependency ratios are calculated based on the number of children (0-14 years old) or older adults (i.e., seniors aged 65 years and older) to the working-age population (15-64 years old). These ratios help to better understand the economic, social, and other responsibilities placed on the working population to support dependents both young and old. Both child and older adult dependency ratios are calculated by dividing the number of dependents (young or old) by the number of individuals in the working-age population. In the Rural West service area, the child dependency ratio is projected to decrease from 33.8 in 2020 to 33.0 in 2029, while the senior dependency ratio is projected to increase from 32.6 in 2020 to 42.1 in 2029. Age dependency ratios are a measure of the nonworking age population relative to the population of working age (18-64). This serves as a useful indicator of an area's age structure. A higher senior dependency ratio reveals that seniors represent a larger share of the dependent population. Not only do these dependency ratios impact families and communities in diverse ways (e.g., elder care, child care) but it also impacts the way healthcare systems grow and develop their services to meet the needs of the populations they serve.

Total Population by Age	Census 2020 Number	Census 2020 Percent	2024 Number	2024 Percent	2029 Number	2029 Percent
65 - 69	9,725	6.4%	10,705	7.0%	10,996	7.1%
70 - 74	7,926	5.2%	8,572	5.6%	9,808	6.3%
75 - 79	5,306	3.5%	6,415	4.2%	7,252	4.7%
80 - 84	3,404	2.2%	3,880	2.5%	5,004	3.2%
85+	3,428	2.3%	3,599	2.3%	4,124	2.7%
Child Dependency Ratio	33.8	-	33.6	-	33.0	-
Senior Dependency Ratio	32.6	-	36.7	-	42.1	-

The United Health Foundation annually publishes Senior Health Rankings indicating 52 measures of health to provide a comprehensive overview of the health and wellbeing of older adults in the United States. Overall, Pennsylvania was ranked 24th out of 50 states. Metrics that have shown recent improvement have greater availability of geriatric clinicians and home healthcare workers, which increased in Pennsylvania. However, poverty increased significantly, to a rate of 29% in Pennsylvania. Pennsylvania also ranked 37th out of 50 states in health behaviors (i.e., nutrition and physical activity, sleep health, smoking). For physical environment health (i.e., air and water quality, housing and transit), Pennsylvania ranked 31st.

Older adult mental health is a growing concern in the United States. In Pennsylvania, 8.5% of older adults experience frequent mental health distress and 17.7% experience depression. Overall, 9.4% of older adults in the United States experienced frequent mental distress and 15.5% experience depression. Frequent mental health distress is defined by 14 or more days of self-reported poor mental health in the past month. Factors that can contribute to frequent mental distress are the inability to afford healthcare, living alone, and activity limitations due to chronic conditions, physical disabilities, or mental health problems. One reason that the older adult population may not receive adequate mental care is because symptoms of some mental health issues like depression or lapses in memory often get dismissed as typical aspects of aging.

Social isolation is another significant factor that can negatively impact older adult mental and physical health. Many older adults experience isolation due to multiple factors, such as reduced mobility, loss of friends or family, and geographic distance from social support networks. This isolation can lead to increased feelings of loneliness, which can increase risk of depression, anxiety, and cognitive decline. Additionally, socially isolated older adults may have limited access to healthcare services, impacting their overall well-being and potentially exacerbating existing health conditions. The United Health Foundation Health Rankings index social isolation factors to better understand the risk of social isolation for adults 65 and older. Factors include: living in poverty; living alone; being divorced, separated, widowed; having never married; having a disability; having an independent living difficulty. Values are 1-100, with a higher value indicating greater risk. Pennsylvania has a value of 61 and ranked 33rd out of 50 states in social isolation.
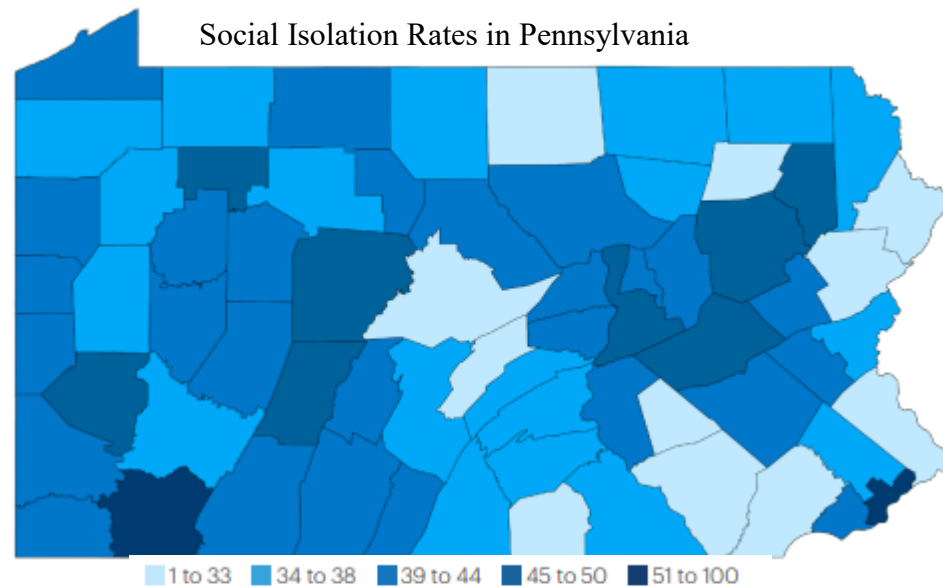
Source: US Census Bureau, ACS 2018-2022, United Health Foundation
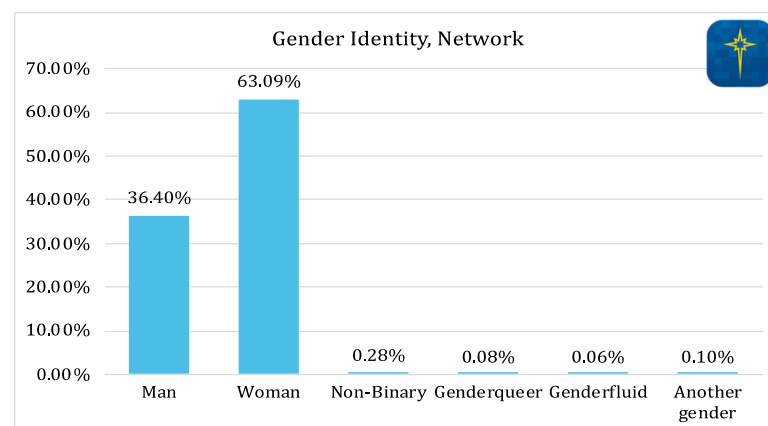
"A lot of our elderly population is isolated and need socialization. Exposing them to the great resources we have, like senior meals and senior centers, may help them be more willing to participate."

Rural West Service Area

# Lesbian, Gay, Bisexual, Transgender, Queer + (LGBTQ+)

According to the University of California Los Angeles (UCLA) Williams Institute, 4.1% of individuals living in Pennsylvania identify as Lesbian, Gay, Bisexual, Transgender, Queer+ (LGBTQ+). Pennsylvania is ranked 24th out of the 50 states for total LGBTQ+ population. In Pennsylvania, 56% of the LGBTQ+ population identify as female and 44% male and 67% identify as White, 13% Black, and 12% Hispanic/Latino(a). The average age of LGBTQ+ individuals in Pennsylvania is 36.8, with 56% of the population between the ages of 18-24 years old. The unemployment rate of Pennsylvania LGBTQ+ individuals is 11% compared to 5% of non-LGBTQ+ individuals, 10% of Pennsylvania LGBTQ+ individuals are uninsured, 26% are food insecure, and 27% have an income less than $24,000 a year. While 47% of Pennsylvania LGBTQ+ individuals have a high school diploma, only 16% have a bachelor's degree.

LGBTQ+ individuals are considered a vulnerable population due to the unique challenges and systemic barriers they face due to discrimination, stigmatization, and a lack of legal protections that often contribute to poor health outcomes. LGBTQ+ individuals face depression, anxiety, and suicidal ideation at higher rates than the majority of the population and may lack social support, which can lead to social isolation and economic instability. Many LGBTQ+ individuals report discrimination and stigma in healthcare settings, which can lead to mistrust of medical professionals and reluctance to seek necessary care. LGBTQ+ populations are at higher risk than the population as a whole for mental health, substance use disorders, sexually transmitted infections, and other health issues. Barriers to accessing appropriate care from healthcare providers trained in LGBTQ+ specific health concerns further exacerbates these issues, resulting in gaps in care.

Gender Identity, Network
Man 36.40%, Woman 63.09%, Non-Binary 0.28%, Genderqueer 0.08%, Genderfluid 0.06%, Another gender 0.10%

In 2022, the Bradbury-Sullivan LGBT Community Center in Allentown, Pennsylvania, with funding from the PA Department of Health, conducted a Pennsylvania statewide LGBT Needs Assessment. In total, 4,228 LGBTQ+ individuals responded to the survey. The results identified risk factors related to LGBTQ+ health, including that 27.4% of respondents had not visited the doctor for a routine check-up in a year or longer, 43.0% had not visited the dentist in the past year, and nearly half of respondents feared seeking healthcare services because of past or potential negative reactions from healthcare providers. From the St. Luke's CHNA survey, 4.3% of survey respondents from the Rural West service area identify as LGBTQ+. Additionally, 0.28% of survey respondents across the Network identify as non-binary, 0.08% identify as genderqueer, 0.06% identify as gender fluid, and 0.1% identify as another gender.
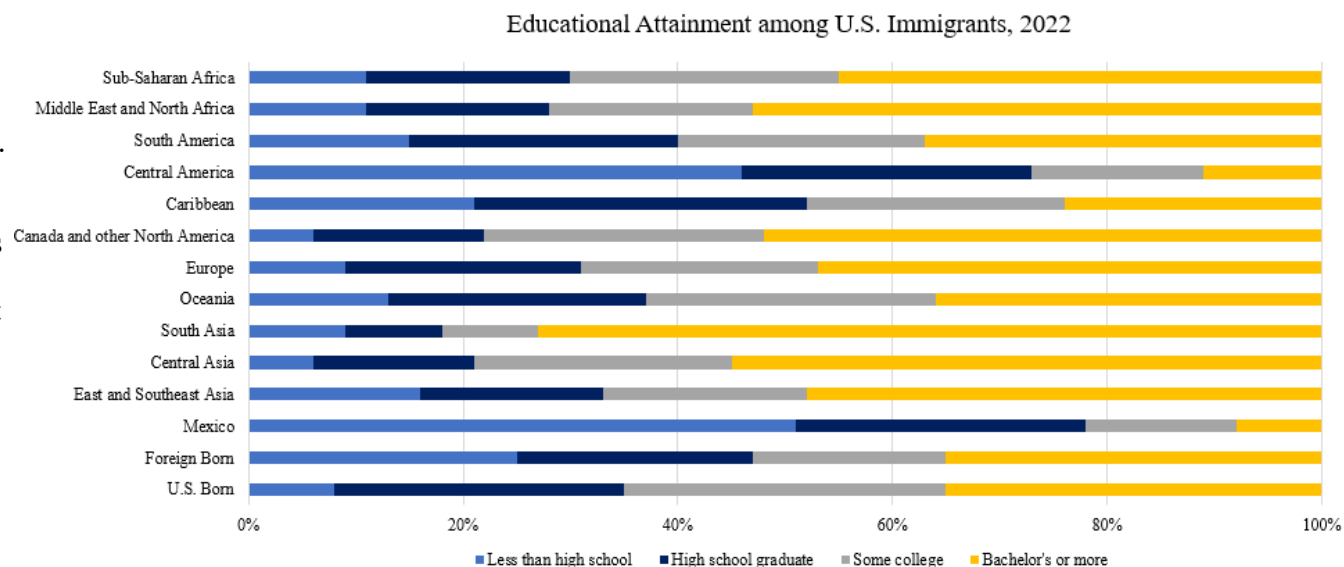

CHNA Survey Respondents LGBTQ+ Identification, Rural West Service Area
4.3% Yes, 95.7% No
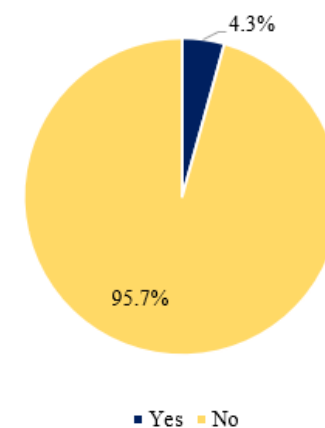
According to the 2018-2022 ACS estimates, the number of foreign-born people in the United States increased by more than 5 million over 10 years to 45.3 million or 13.7% of the nation's population. According to the US Census Bureau, foreign-born populations consists of anyone living in the United States who was not a U.S. citizen at birth, including naturalized U.S. citizens, lawful permanent residents (i.e., immigrants), temporary migrants such as foreign students, humanitarian migrants such as refugees and asylees, and unauthorized migrants.

Nationally, immigrants made up over one-fifth of the population in four states: California (26.5%), New Jersey (23.2%), New York (22.6%) and Florida (21.1%).

Educational Attainment among U.S. Immigrants, 2022

■ Less than high school ■ High school graduate ▩ Some college ■ Bachelor's or more

Source: Pew Research Center, 2022

Origins of the US Foreign-born Population

■ Mexico/ Latin America ▨ Asia ▩ Europe/Canada and other North America
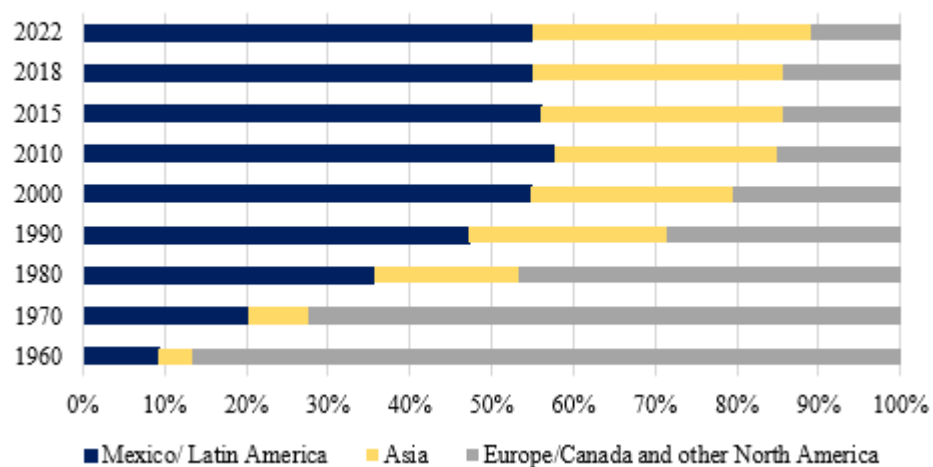
Source: ACS, 2022

In Pennsylvania, the foreign-born population is 7.3%. Almost half (49.1%) of all immigrants in the United States entered the country before 2000, and more than half were naturalized US citizens. Nearly a quarter of the foreign-born population 25 years and older have a bachelor's (18.7%) or graduate or professional degree (14.9%), compared to 21.4% and 13.1% for the native-born population. An estimated 63.5% were employed, with over a third of the civilian employed foreign-born population (16 years and older) in management, business, science and arts occupations.

Foreign-born populations often face challenges in accessing healthcare due to language barriers, cultural differences, and lack of health literacy and understanding of the healthcare system. Legal and financial obstacles (e.g., lack of health insurance, fear of deportation) further complicate these issues, making it difficult for many foreign-born populations to receive quality care. Language barriers are significant for individuals trying to access care with limited English proficiency.

Rural West Service Area

········· Language Diversity ·········

English is the language most widely spoken in the Lehigh Valley and surrounding areas of Pennsylvania. However, many people in the SLUHN service area may be identified as having limited English proficiency. Limited English proficiency is reported as the percentage of the population five years and older who speak a language other than English at home and speak English less than "very well." Respondents were not instructed on how to interpret the meaning of "very well." Speaking and understanding English is important in the Rural West service area because most health services are provided in English. Language can also be a large barrier to educational attainment, higher income, employment, and accessing healthcare.

Translation and interpretation services are required in locations where either 5% of the community speaks a different language or over 1,000 community members speak a different language. A translator typically only translates the written word while interpreters translate orally. The Rural West service area zip codes that require translator or interpreter services are highlighted in red. Of the Rural West service area, five zip codes require language services for Spanish speakers and one zip code requires services for other Indo-European languages (not including West Germanic and Slavic languages).

Network Service Area Languages			
Top Zip Codes	Percentage and Number of Spanish Speakers in Zip Code	Percentage and Number of Spanish Speakers in Zip Code Who Speak English Less than "Very Well"	Next Frequent Language
18235	3.1% (566 people)	4.1% (23 people)	Other Indo-European languages (1.7%- 314 people)
18252	3.6% (381 people)	50.9% (194 people)	Other Indo-European languages (0.7%- 79 people)
18071	1.8% (191 people)	9.9% (19 people)	Other Indo-European languages (0.7%- 80 people)
18229	2.9% (254 people)	18.1% (46 people)	Other Indo-European languages (1.2%- 106 people)
18232	9.2% (342 people)	3.1% (11 people)	Other Indo-European languages (0.4%- 16 people)
18240	2.6% (96 people)	0% (0 people)	Asian and Pacific languages (0.4%- 16 people)
18250	0.6% (18 people)	0% (0 people)	Other Indo-European languages (3.4%- 101 people)
18218	6.2% (133 people)	21.8% (29 people)	Other Indo-European languages (0.7%- 14 people)
18210	6.5% (1,154)	46.0% (208 people)	Other Indo-European languages (9.4%- 656 people)
18058	3.0% (284 people)	27.1% (77 people)	Other Indo-European languages (2.8%- 266 people)
18080	3.2% (341 people)	54.3% (185 people)	Other Indo-European languages (1.3%- 134 people)
17948	6.3% (244 people)	31.6% (77 people)	Other languages (1.8%- 70 people)
17960	1.3% (53 people)	0% (0 people)	Other Indo-European languages (3.5%- 141 people)
18088	1.9% (147 people)	0.0% (0 people)	Other Indo-European languages (2.1%- 166 people)
18201	52.7% (15, 341 people)	54.5% (8,363 people)	Other Indo-European languages (2.2%- 655 people)
18214	1.0% (20 people)	25.0% (5 people)	Asian and Pacific Island languages (2.6%- 55 people)
18255	0.4% (16 people)	0% (0 people)	Other Indo-European languages (1.1%- 47 people)

Rural West Service Area

·········· Children and Adolescents ·········

Children and adolescents in the United States are a diverse and rapidly evolving segment of the population. According to the National Center for Health Statistics at the Centers for Disease Control (CDC), the fertility rate in the United States has decreased by 2% annually since 2014, with an all-time low at 3,591,328 births in 2023. While birth rates are the lowest they have been in the history of the United States, the racial and ethnic diversity of children is increasing. Children and adolescents under 18 years old comprise 22% of the population (72,325,602 individuals). According to the 2020 US Census, there were 30,950 children and adolescents under 18 years old in the Rural West service area, which accounted for 20.3% of the population. According to Esri estimates, this number is projected to decrease to 19.7% of the population in 2024 and 18.9% of the population in 2029.

Childhood is a critical time for healthcare prevention and education to promote overall health and wellbeing. Routine preventative care, including vaccinations, annual well visits, and developmental screenings are crucial. Mental health services are in high demand, as many youth face challenges related to stress, anxiety, depression, and other behavioral issues. Access to proper nutrition and physical activity programs supports their physical health, while educational initiatives around health and wellness promote lifelong healthy habits. Health insurance is critical for all children to ensure they receive consistent quality care. The Children's Health Insurance Program (CHIP) provides healthcare coverage to children from low-income families who do not qualify for Medicaid but cannot afford private insurance. By offering comprehensive health benefits such as routine check-ups, immunizations, doctor visits, prescriptions, dental, and vision care. Childhood is a crucial time for development in all aspects of life, thus it is important to study health behaviors and target initiatives towards addressing negative health patterns in youth.

County	Number of Children enrolled in CHIP (2024)
Berks	8,348
Bucks	8,871
Carbon	981
Lehigh	7,312
Luzerne	5,294
Monroe	2,724
Montgomery	9,760
Northampton	4,455
Schuylkill	2,046
Warren (NJ)	3,215
Hunterdon (NJ)	4,508
Pennsylvania	167,790
New Jersey	230,000
United States	7,056,520

The 2023 Pennsylvania Youth Survey (PAYS) is run by the Pennsylvania Commission on Crime and Delinquency and asks questions pertaining to drug use, violence, mental health, school safety, and more. PAYS is administered (by paper or online) biennially in odd years to students in grades 6, 8, 10, and 12. There were a total of 262,535 students across Pennsylvania that participated in the 2023 PAYS (72.7% of eligible students). The survey highlights critical issues such as substance use, with alcohol and vaping being the most prevalent among students. Mental health concerns are also prominent, with significant reports of depression, anxiety, and suicidal ideation. Additionally, the survey sheds light on school safety, revealing that while many students feel safe, bullying and violence remain concerns. The PAYS data helps schools, community-based organizations, and policymakers understand the root causes of problem behaviors and develop targeted interventions and support systems to address these issues effectively. Details of the findings of the PAYS data as it relates to this CHNA can be found throughout the draft.

"We frequently have students in crisis and there are very limited resources for them."

Education Access and Quality

Education access and quality is crucial to improving health outcomes and reducing health disparities. Good quality education provides individuals with the knowledge and skills to foster better community while providing greater opportunity for higher income potential. Education access and quality is a critical component of the social determinants of health, with factors intrinsically linked to health outcomes.

According to Healthy People 2030, the following objectives are related to education access and quality and are measured at the national level. Most Healthy People 2030 objectives are core, or measurable, objectives that are related to targets outlined for the decade (2020-2030). Evidence-based interventions are supported through national, state, and local initiatives. Progress is measured using a variety of data sources (e.g., US Census, ACS estimates, state and county data) and is measured using the following indicators: Baseline only, target met or exceeded, improving, little or no detectable change, getting worse. The objectives outlined have corresponding updates at the national level as of June 2024.

Baseline Only: We don't yet have data beyond the initial baseline data, so we don't know if we've made progress.

Target met or exceeded: We've achieved the target we set at the beginning of the decade.

Improving: We're making progress toward meeting our target.

Little or no detectable change: We haven't made progress or lost ground.

Getting worse: We're farther from meeting our target than we were at the beginning of the decade.

Healthy People 2030 objectives for Education Access and Quality	Baseline	Target	Most Recent Data	Progress
Increase the proportion of high school students who graduate in four years	84.1% (2015-16)	90.7%	86.6% (2021-22)	Improving
Increase the proportion of high school graduates in college the October after graduating	69.1% (2018)	73.7%	62% (2022)	Getting worse
Increase the proportion of students with disabilities who are usually in regular education programs	63.5% (2017-18)	73.3%	66.9% (2022-23)	Improving
Increase the proportion of 4th-graders with reading skills at or above the proficient level	36.6% (2017)	41.5%	33.3% (2022)	Getting worse
Increase the proportion of 4th-graders with math skills at or above the proficient level	40.2% (2017)	43.1%	36.3% (2022)	Getting worse
Reduce the proportion of adolescents and young adults (16-24 years old) who aren't in school or working	11.5% (2017)	11.2%	10.9% (2022)	Target met or exceeded
Increase the proportion of children whose family read to them at least 4 days per week	58.3% (2016-17)	63.2%	55.1% (2020-21)	Getting worse

Rural West Service Area

Educational attainment is linked to income and employment, laying the building blocks for the next generation to have improved socioeconomic status and correlated positive health outcomes. Healthy People 2030 set a target goal for the percentage of students who graduate high school within four years at 90.7%. In Pennsylvania, 87% of people have a high school diploma or equivalent.

Of all survey respondents in the Rural West service area, 96.5% have a high school degree or higher, 0.7% have less than a high school degree, and 2.8% have some high school education. When looking at the respondents that reported a high school degree or higher, 29.0% of respondents that reported only a high school degree, 19.9% have some college, 19.0% have an associate's degree, 15.6% have a bachelor's degree, and 13.0% have a post college or graduate degree. Survey results show that respondents have much higher rates of higher education than the general public (see figure below). Additionally, CHNA survey results have lower percentages of respondents with less than a high school diploma compared to the general public. It should be noted that people with higher levels of education are more likely to live healthier and longer lives than those with lower education levels. Healthy People 2030 states that children with less access to quality education are less likely to get safe, high-paying jobs and are more likely to develop health problems (e.g., heart disease, diabetes). This is a significant concern because it is crucial to identify and work with populations with lower access to education and healthcare to aid in healthy lifestyles and well-being.

Educational Attainment, SLUHN Service Areas (2024)

Service Area	Less than 12th Grade/No Diploma	High School Diploma/GED	Some College/No Degree	Associate's Degree	Bachelor's Degree	Graduate/Professional Degree
Warren	6.6%	32.5%	14.5%	10.3%	22.6%	13.4%
Rural West	12.0%	42.9%	15.9%	11.4%	12.0%	5.8%
Quakertown and Upper Bucks	4.5%	30.8%	13.4%	9.2%	25.7%	16.4%
Monroe	8.7%	36.0%	17.9%	10.1%	17.1%	10.3%
Geisinger St. Luke's	8.7%	44.1%	13.7%	11.5%	14.5%	7.5%
Bethlehem University Hospital	7.9%	32.2%	15.2%	10.2%	21.2%	13.4%
Anderson and Easton	7.5%	32.0%	15.2%	10.3%	21.1%	13.8%
Allentown and Sacred Heart	8.7%	33.2%	15.1%	10.4%	20.3%	12.4%
Network Service Area	7.8%	34.3%	15.4%	10.4%	19.8%	12.3%

Source: Esri, 2024

The increasing cost of education has become a significant barrier to educational attainment, especially for vulnerable populations. Cost of education exacerbates educational and socioeconomic inequalities. The National Center for Education Statistics reported that average tuition and fees in 2022–23 were $9,800 for public institutions, $18,200 for private for-profit institutions, and $40,700 for private nonprofit institutions.

It is important for all children to feel safe at school in order to learn, socialize, and develop. Perceived lack of school safety and school violence has a negative impact on mental health outcomes and school performance. PAYS 2023 reported on the percentage of students at risk in Pennsylvania. The three overall highest risk scores for students of all grades in Pennsylvania were low commitment towards school (56.6% of students at risk), parental attitudes favorable towards antisocial behavior (54.7% at risk), and low neighborhood attachment (44.6% at risk). The risk scores for Carbon County and Schuylkill County respectively were low commitment towards school (61.3% and 58.2% of students at risk), parental attitudes favorable towards antisocial behavior (57.0% and 54.0% at risk), and low neighborhood attachment (50.8% and 46.8% at risk). In Carbon County, 19.3% of students report having been threatened with violence on school property and 8.6% of students report having been attacked on school property with a weapon. Finally, 1.3% of students report bringing a weapon to school in the past 30 days. In Schuylkill County, 19.4% of students report having been threatened with violence on school property and 7.7% of students report having been attacked on school property with a weapon. Finally, 1.2% of students report bringing a weapon to school in the past 30 days.

According to the Centers for Disease Control and Prevention (CDC), those who experience bullying are at increased risk for mental health disorders, suicide, substance use disorder, violence, poor school performance, and other poor health outcomes. In Carbon County, 29.5% of students report experiencing bullying in the past 12 months and 28.2% of students in Schuylkill County. Of the students in Carbon and Schuylkill County who have been bullied and respectively, 11.9% and 11.4% of students experienced bullying via text or social media, 64.8% and 66.5% experienced bullying through emotional abuse like insults or name calling, 18.3% and 19.9% through physical injury, or through threats (28.8% and 26.4%). Of the students in Carbon County that reported being cyberbullied, 28.8% indicated feeling so sad or hopeless every day for the past 2 weeks they stopped doing usual activities; and in the past year, 18.6% of those students seriously considered suicide, 14.6% made a suicide plan, and 6.6% had attempted suicide. Of the students in the Schuylkill County that reported being cyberbullied, 27.5% indicated feeling so sad or hopeless every day for the past 2 weeks they stopped doing usual activities; and in the past year, 16.4% of those students seriously considered suicide, 13.4% made a suicide plan, and 5.4% had attempted suicide. The use of technology and social media has made bullying more pervasive in the lives of youth in recent years. Bullying continues to be a problem in schools, especially for LGBTQ+ students who often face harassment or discrimination due to their sexual orientation or identity. The National Center for Biotechnology Information found that while bullying victimization rates have improved in general, LGBTQ+ youth still experience bullying at higher rates than their cisgender peers.
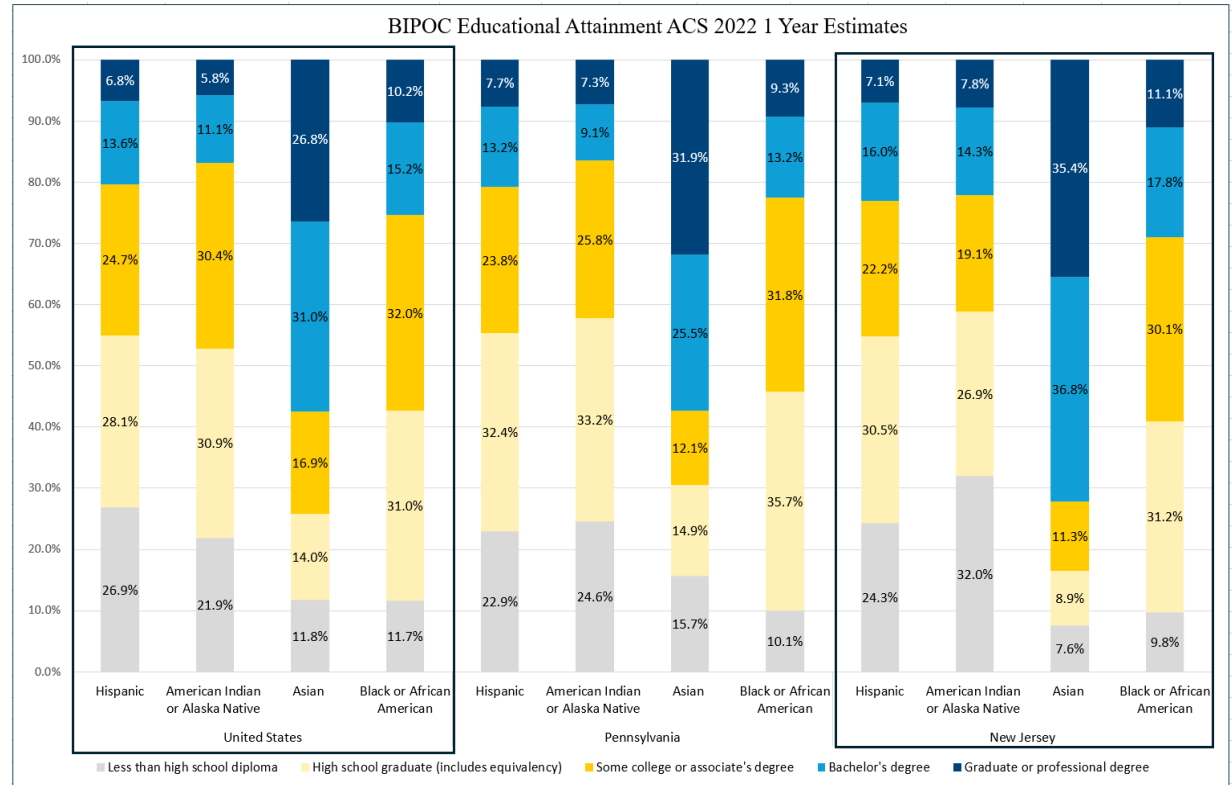

Perceived Reasons for Bullying, All Students
PAYS (2023)

2019   2021   2023

Rural West Service Area
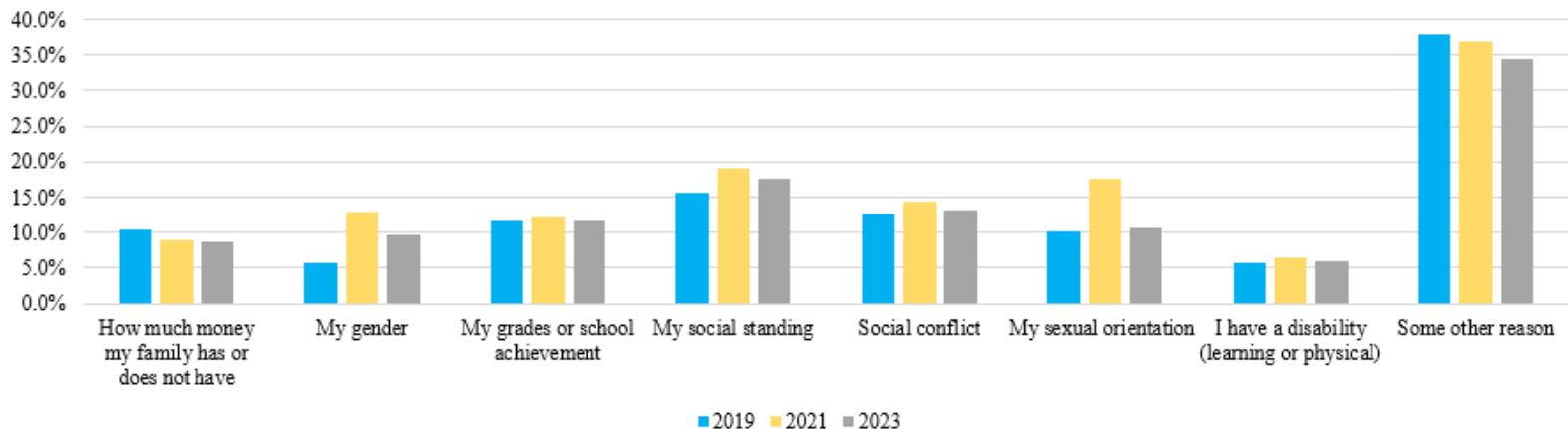
When looking at BIPOC communities, there are disparities in attaining higher education compared to White communities. According to the National Center for Education Statistics, Hispanic/Latino(a), Black, and American Indian/Alaska Native students have the lowest rates of undergraduate enrollment. According to the US Census 2022 American Community Survey, 79.7% of those who identify as Hispanic have less than a bachelor's degree, 83.2% of those who identify as American Indian or Alaska Native have less than a bachelor's degree, and 74.6% of those who identify as Black have less than a bachelor's degree. The percentage of those without a bachelor's degree is significantly higher for Hispanic/Latino(a), Black, and American Indian/Alaska Native students compared to Asian (42.6%) and White (61%) counterparts.

BIPOC Educational Attainment ACS 2022 1 Year Estimates

Of the foreign-born population in the United States, 65.3% have less than a bachelor's degree according to US Census 2022 American Community Survey. In Pennsylvania, 58.8% of the foreign-born population have less than a bachelor's degree.

A 2021 report by the National Center of Education Statistics found the US average of public school students who were English language learners (ELL) was 10.6%. Pennsylvania has a statewide average of 4.6% of public school students who are ELL. There was a higher percentage of ELL in school districts in more urbanized areas (i.e., cities) and a lower percentage for less urbanized, rural areas. Spanish was the highest reported home language of ELL, representing the home language of 76.4% of all ELL and 8.4% of all public school students. The following eight highest reported home languages by ELL public school students (in order) were Arabic, Chinese, Vietnamese, Portuguese, Russian, Haitian Creole, Hmong, and Urdu.

Foreign-born Population 2022 ACS 1 Year Estimates			
Educational Attainment	United States	Pennsylvania	New Jersey
Less than high school diploma	24.9%	18.0%	18.2%
High school graduate (includes equivalency)	22.1%	23.4%	23.2%
Some college or associate's degree	18.3%	17.4%	17.4%
Bachelor's degree	19.1%	20.2%	22.9%
Graduate or professional degree	15.6%	21.0%	18.4%

Rural West Service Area

Economic Stability

Economic stability is a cornerstone of individual and community health, influencing access to care, education, housing, transportation, and more. Financial insecurity can lead to chronic stress, poor mental health, and limited access to healthcare, which can lead to negative health outcomes. Healthy People 2030 outlines objectives for economic stability related to these issues, including reducing poverty, increasing employment opportunities, reducing food insecurity, and improving access to affordable housing. These objectives are designed to address economic stability as a social determinant of health, recognizing the economic factors are intrinsically linked to health outcomes.

According to Healthy People 2030, the following objectives are related to economic stability and are measured at the national level. Most Healthy People 2030 objectives are core, or measurable, objectives that are related to targets outlined for the decade (2020-2030). Evidence-based interventions are supported through national, state, and local initiatives. Progress is measured using a variety of data sources (e.g., US Census, ACS estimates, state and county data) and is measured using the following indicators: Baseline only, target met or exceeded, improving, little or no detectable change, getting worse. The objectives outlined have corresponding updates at the national level as of June 2024.

Baseline Only: We don't yet have data beyond the initial baseline data, so we don't know if we've made progress.

Target met or exceeded: We've achieved the target we set at the beginning of the decade.

Improving: We're making progress toward meeting our target.

Little or no detectable change: We haven't made progress or lost ground.

Getting worse: We're farther from meeting our target than we were at the beginning of the decade.

Healthy People 2030 objectives for Economic Stability	Baseline	Target	Most Recent Data	Progress
Increase employment in working-age people (16 to 64 years old)	70.6% (2018)	75%	71.3% (2022)	Improving
Increase the proportion of children (17 years and younger) living with at least one parent who works full time	77.9% (2017)	85.1%	79.4% (2022)	Improving
Reduce the proportion of people living in poverty	11.8% (2018)	8.0%	11.5% (2022)	Little or no detectable change
Reduce the proportion of families that spend more than 30 percent of income on housing (i.e., cost-burdened)	34.6% (2017)	25.5%	35.0% (2021)	Little or no detectable change
Reduce household food insecurity and hunger	11.1% (2018)	6.0%	12.8% (2022)	Getting worse
Eliminate very low food security in children under 18 years	0.59% (2018)	0.0%	1.02% (2022)	Getting worse
Increase trips to work made by mass transit	5.0% (2017)	5.3%	5.0%	Little or no detectable change

Rural West Service Area

Household Income and Poverty

Household income and poverty are interconnected, with significant implications for both individual and community wellbeing. Household income is defined as the total gross income of all members of a household, including wages, salaries, benefits, and any other earnings within a year. This can be income from employment, investments (e.g., rental properties, stocks, businesses), pensions, and government assistance programs. Household income is a key measure utilized for eligibility for social services, tax brackets, as well as understanding economic disparities within populations.
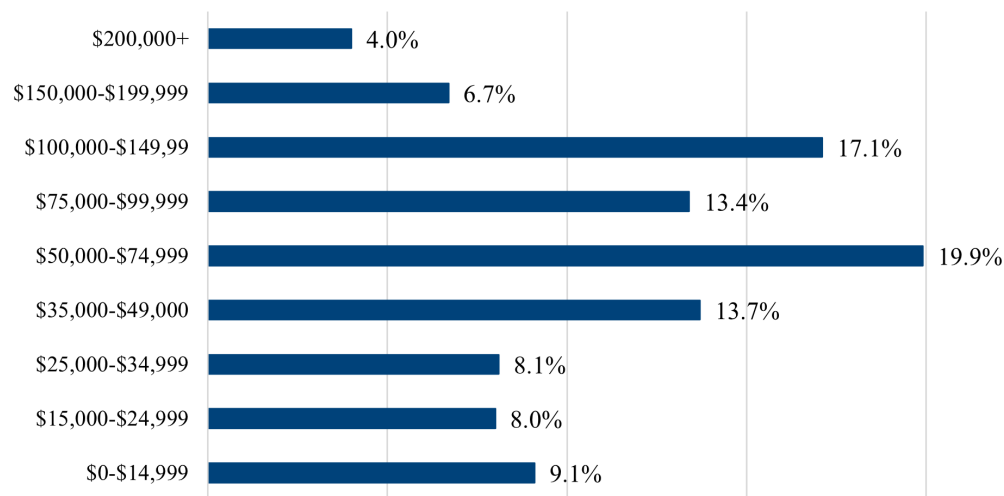
The 2024 Federal Poverty Level (FPL) guideline is measured at $15,060 a year for one person and $31,200 for a family of four. If one person is 200% of the Federal Poverty Level, they make $30,120; if a family of four is 200% of the Federal Poverty Level, they make $62,400. In Pennsylvania, 11.8% of people live at or below the FPL and 12.6% nationwide. In 2022, 10.2% in Carbon County and 12.2% in Schuylkill County lived in poverty. In the Rural West service area, the median household income is $61,564 and the per capita income is $32,288.

"Affordable housing and income levels for people do not match up. It is hard to make a living wage and be able to afford to live in this area."

2022 Estimates	Number in Poverty	Percent in Poverty
United States	40,951,625	12.6
New Jersey	879,100	9.7
Pennsylvania	1,483,039	11.8
Berks County	45,310	10.8
Bucks County	37,561	5.9
Carbon County	6,600	10.2
Lehigh County	41,650	11.3
Luzerne County	47,930	15.2
Monroe County	20,227	12.3
Montgomery County	55,916	6.6
Northampton County	32,077	10.6
Schuylkill County	16,576	12.2
Hunterdon County	5,227	4.1
Warren County	7,628	7

Household Income, Rural West (2024 Estimates)

Income Range	Percent
$200,000+	4.0%
$150,000-$199,999	6.7%
$100,000-$149,99	17.1%
$75,000-$99,999	13.4%
$50,000-$74,999	19.9%
$35,000-$49,000	13.7%
$25,000-$34,999	8.1%
$15,000-$24,999	8.0%
$0-$14,999	9.1%

Source: Esri 2024 Estimates

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Rural West Service Area

Of the CHNA survey respondents in the Rural West service area, 43.6% make $60,000 and above, while 18.6% of respondents make $40,000-$59,999, 16.5% make between $25,000-$39,999, 12.9% make between $15,000-$24,999, and 8.5% make less than $14,999. When looking at Hispanic survey respondents in the Rural West service area, 17.9% make more than $60,000 per year compared to 45.3% of non-Hispanic respondents. Additionally, 39.7% of Hispanic survey respondents make less than $25,000 compared to 20.1% of non-Hispanic survey respondents.

CHNA Survey Respondent Household Income, Rural West Service Area

Legend:
- Less than $14,999
- $15,000-$24,999
- $25,000-$39,999
- $40,000-$59,999
- $60,000 and above
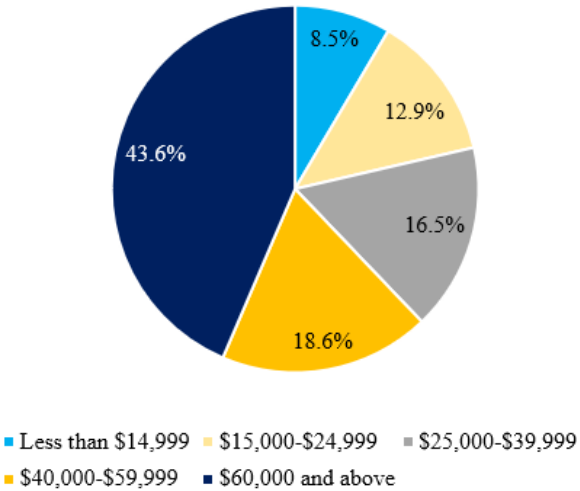
Vulnerable Populations

Household income and poverty impacts vulnerable populations at higher rates than the larger population. ESRI's income inequality P90-P10 ratio, which compares the income at the 90th percentile to the income at the 10th percentile, gives an estimate (2024, 2029) of the income distribution within the Rural West service area. A higher P90-P10 rate indicates greater income inequality, while a lower rate indicates more income equality. According to Esri 2024 estimates, the P90-P10 ratio was 9.6, which is estimated to decrease to 9.1, indicating a trend toward more income equality within the Rural West service area. Additionally, ESRI classifies households into tiers. The Middle Income Tier is defined as the middle 60% of earners, the top 20% of earners are defined as Upper Income Tier and the bottom 20% are defined as Low Income Tier. Households in the Rural West service area in the Low Income Tier are estimated at 23.4% in 2024, and projected to decrease to 19.6% in 2029. Households in the Middle Income Tier are projected to slightly increase from 70.0% in 2024 to 71.8% in 2029 (Esri estimates, 2029). Households in the Upper Income Tier are projected to increase, from 6.6% in 2024 to 8.6% in 2029. These changing demographics are, in part, due to a rising cost of living in the area, which makes it more difficult for lower income families to live in the area.

According to the 2022 Survey of Income and Program Participation (SIPP), there were 4.7 million older adults living in poverty in the United States in 2021. 8.3% of older adults struggle to make ends meet, and these rates are higher for adults 75 and older (42.0%) compared to adults 65-69 years old (33.8%) and 70-74 years old (24.2%). While the White population aged 65 and older is more likely to not live in poverty compare to living in poverty, Black, Asian, and Hispanic populations are more likely to live in poverty than to not live in poverty. Older adult females are also more likely to live in poverty while older adult males are less likely to live in poverty. Many older adults rely on fixed incomes from Social Security, pensions, or retirement savings, which may be insufficient due to rising healthcare costs, living expenses (e.g., rent, food), as well as possible long-term care needs (e.g., assisted living, home healthcare needs).

Income Inequality Measures	2024 Number	2024 Percent	2029 Number	2029 Percent
Household	60,863	100%	61,873	100%
<$15,000	5,514	9.1%	4,657	7.5%
$15,000-$24,999	4,843	8.0%	3,974	6.4%
$25,000-$34,999	4,942	8.1%	4,464	7.2%
$35,000-$49,999	8,309	13.7%	7,780	12.6%
$50,000-$74,999	12,139	19.9%	11,766	19.0%
$75,000-$99,999	8,179	13.4%	8,233	13.3%
$100,000-$149,999	10,424	17.1%	12,266	19.8%
$150,000-$199,999	4,074	6.7%	5,579	9.0%
$200,000+	2,439	4.0%	3,154	5.1%
Median Household Income	$61,564		$70,074	
Average Household Income	$81,376		$93,889	
Per Capita Income	$32,288		$37,677	

Households by Income	2024 Number	2024 Percent	2029 Number	2029 Percent
P90-P10 Ratio	9.6		9.1	
P90-P50 Ratio	2.5		2.4	
P50-P10 Ratio	3.9		3.9	
80-20 Share Ratio	9.9		10.1	
90-40 Share Ratio	2.2		2.3	
Households in Low Income Tier	14,220	23.4%	12,124	19.6%
Households in Middle Income	42,615	70.0%	44,444	71.8%
Households in Upper Income Tier	4,028	6.6%	5,305	8.6%

Source: ESRI 2024 Estimates, Rural West Service Area

Children and adolescents living in poverty often lack access to essential resources including quality healthcare and education, safe and stable housing, and stable food supply which can lead to higher risk of chronic health conditions, malnutrition, and academic underachievement. Additionally, the stress of economic instability on children and adolescents can impact their mental health, resulting in increased rates of anxiety and depression. According to the 2023 PAYS data, 20.7% children in Pennsylvania said they were worried they would run out of food at home due to money issues, 10.7% of students reported skipping a meal because their family didn't have enough money for food, and 21.7% of all students reported at least one of those issues.

Nationwide children are more likely to live in poverty than the population as a whole, and this trend is seen in Pennsylvania, as well as all of the counties in the SLUHN service area. Carbon County has 15.5% of children living in poverty and Schuylkill County has 16.4% of children living in poverty.

2022 Estimates	Percent of the Population in Poverty	Percent of Children in Poverty
United States	12.6	16.3
New Jersey	9.7	12.7
Pennsylvania	11.8	15.2
Berks County	10.8	14.3
Bucks County	5.9	7.0
Carbon County	10.2	15.5
Lehigh County	11.3	15.8
Luzerne County	15.2	21.4
Monroe County	12.3	16.1
Montgomery County	6.6	7.2
Northampton County	10.6	14.3
Schuylkill County	12.2	16.4
Hunterdon County	4.1	4.3
Warren County	7	9.6

Stable and meaningful employment not only provides financial resources but also enhances mental and physical wellbeing by providing a sense of purpose, security, and social connection. People who work and have a livable wage are more likely to have positive health outcomes, but many people in the United States have trouble finding and keeping a job that provides them with a stable and secure income. Healthy People 2030 employment objectives include targeted efforts to promote economic stability by increasing employment rates in working-age people, especially those in marginalized and disadvantaged groups. Objectives include promoting job quality and providing safe and healthy working conditions. Quality jobs contribute to better physical and mental health by reducing work-related stress, preventing occupational injuries, and promoting social equity. Additionally, by addressing employment as a social determinant of health, other related issues (e.g., housing instability, food insecurity, lack of access to healthcare) can be mitigated through economic stability.

According to 2024 estimates, there are a total of 72,865 individuals that are employed in the Rural West service area. The healthcare sector accounts for the largest percentage of workers in the Rural West service area (16.1%), followed by manufacturing (16.0%) and retail trade (13.0%). which are all higher than the nationwide percentage distribution for those service areas.

When analyzed by civilian labor force profiles, white collar work is defined as employment that typically involves performing professional, managerial, or administrative tasks in an office setting. Blue collar work is defined as employment that typically involves manual labor or skilled trades, often performed in industrial, construction, or service environments. Service work is defined as providing assistance, support, or expertise to individuals or organizations rather than producing physical goods. Service work typically produces intangible benefits or outcomes through personal interaction, consultation, or specialized skills. Examples include healthcare roles (e.g., doctors, nurses), education (e.g., teachers), financial services (e.g., bankers) and other professional services (e.g., lawyers). In the Rural West service area, 46.9% of employed individuals are designated white collar, 36.4% blue collar, and 16.7% designated as service employed.

Workforce Distribution by Industry and Occupation, Rural West Service Area (Esri Estimates, 2024)

Industry	Employed	Percent	US Percent
Total	72,865	100.0%	100.0%
Agriculture/Forestry/Fishing	469	0.6%	1.1%
Mining/Quarrying/Oil & Gas	251	0.3%	0.3%
Construction	5,173	7.1%	6.9%
Manufacturing	11,648	16.0%	10.0%
Wholesale Trade	1,713	2.4%	2.0%
Retail Trade	9,466	13.0%	10.5%
Transportation/Warehousing	6,517	8.9%	5.1%
Utilities	713	1.0%	0.9%
Information	943	1.3%	2.0%
Finance/Insurance	2,255	3.1%	4.8%
Real Estate/Rental/Leasing	622	0.9%	1.8%
Professional/Scientific/Tech	2,462	3.4%	8.3%
Management of Companies	82	0.1%	0.1%
Admin/Support/Waste Management	2,576	3.5%	4.3%
Educational Services	4,917	6.7%	9.1%
Health Care/Social Assistance	11,702	16.1%	14.1%
Arts/Entertainment/Recreation	1,449	2.0%	2.3%
Accommodation/Food Services	4,370	6.0%	6.8%
Other Services (Excluding Public)	3,011	4.1%	4.6%
Public Administration	2,526	3.5%	5.0%

Occupation	Employed	Percent	US Percent
Total	72,865	100.0%	100.0%
White Collar	34,153	46.9%	62.6%
Management	5,441	7.5%	12.1%
Business/Financial	2,043	2.8%	6.3%
Computer/Mathematical	1,458	2.0%	4.1%
Architecture/Engineering	1,170	1.6%	2.4%
Life/Physical/Social Sciences	744	1.0%	1.3%
Community/Social Service	1,079	1.5%	1.8%
Legal	394	0.5%	1.2%
Education/Training/Library	3,397	4.7%	6.2%
Arts/Design/Entertainment	1,097	1.5%	2.2%
Healthcare Practitioner	4,499	6.2%	6.4%
Sales and Sales Related	5,268	7.2%	8.5%
Office/Administrative Support	7,563	10.4%	10.1%
Blue Collar	26,538	36.4%	21.0%
Farming/Fishing/Forestry	455	0.6%	0.5%
Construction/Extraction	4,153	5.7%	4.9%
Installation/Maintenance/Repair	3,459	4.7%	2.9%
Production	6,746	9.3%	5.3%
Transportation/Material Moving	11,725	16.1%	7.5%
Services	12,174	16.7%	16.4%
Healthcare Support	3,094	4.2%	3.3%
Protective Service	1,179	1.6%	2.1%
Food Preparation/Serving	3,462	4.8%	5.3%
Building Maintenance	2,445	3.4%	3.2%
Personal Care/Service	1,994	2.7%	2.6%

Employment is also critical to access to care and services for the working population ages 18-64 years old that are most often not eligible for government healthcare programs (i.e., CHIP, Medicare). While Medicaid is available for individuals 18-64 years old if they qualify, the majority of the population living above the Medicaid threshold has their health insurance through their employer or through state Healthcare Marketplaces (i.e., out-of-pocket expense, self pay). The Medicaid income threshold for a single person in Pennsylvania (May, 2024) is $965.10 per month for Regular Medicaid/Aged Blind/Disabled individuals.

As of June 2024, the unemployment rate was 3.4% in Pennsylvania. In the Rural West service area, the unemployment rate was 3.7%. Unemployment varies by age, race, and ethnicity. In the Rural West service area, the highest unemployment rate is in the 16-24 year old population (9.2%) and the lowest unemployment rate is in the 65+ year old population (0.7%). The highest unemployment rate by race is in Black individuals 16 years and older (7.8%).

Labor Force by Age and Race, Rural West Service Area

(Esri Estimates, 2024)

Age Group	Population	Employed	Unemployed	Unemployment Rate	Labor Force Participation Rate
			2024 Labor Force		
16+	127,325	72,865	2,780	3.7%	59.4%
16-24	15,501	9,477	956	9.2%	67.3%
25-54	55,857	43,200	1,423	3.2%	79.9%
55-64	22,796	14,285	359	2.5%	64.2%
65+	33,171	5,903	42	0.7%	17.9%
Male Age 16+	65,263	39,777	1,474	3.6%	63.2%
Female Age 16+	62,062	33,085	1,319	3.8%	55.4%
White Age 16+	99,579	56,511	2,095	3.6%	58.9%
Black Age 16+	4,853	1,741	148	7.8%	38.9%
American Indian Age 16+	433	237	3	1.2%	55.4%
Asian Age 16+	815	421	20	4.5%	54.1%
Pacific Islander Age 16+	57	38	0	0.0%	66.7%
Other Race Age 16+	12,406	8,024	284	3.4%	67.0%
Multiple Races Age 16+	9,182	5,899	236	3.8%	66.8%

Economic Dependency Ratio	
Total	106.4
Child (<16)	36.6
Working-Age (16-64)	32.6
Senior (65+)	37.1

The Economic Dependency Ratio is a measure that compares the number of dependents in a population that are typically not in the labor force (e.g., children, older adults) to the number of working age who are economically productive. The higher the dependency ratio, the greater the burden on the working age population to support dependents. In the Rural West service area, the child dependency ratio is 36.6, meaning that for every 100 working age individuals, there are approximately 36.6 child dependents. The senior dependency ratio is 37.1, meaning there are approximately 37.1 seniors (i.e., adults aged 65 and older) for every 100 working age individuals. According to the UCLA Williams Institute, 9% of the LGBT+ population is unemployed compared to 5% of the total population. Unemployment rates for LGBT+ populations are higher in Pennsylvania (11%) compared to the total population.
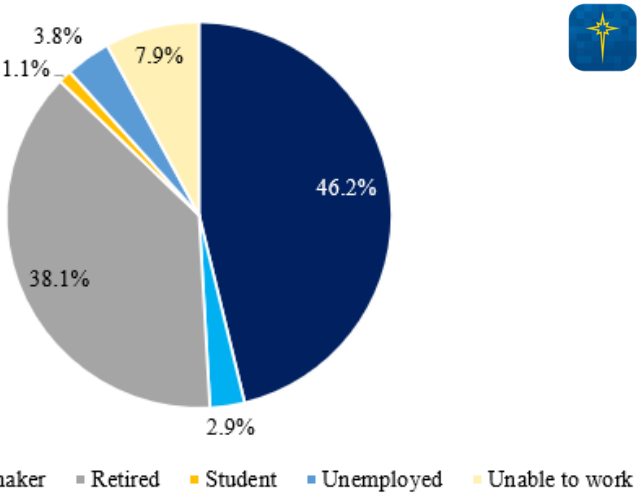
Foreign born populations in the United States often face unique challenges in the labor market, which can contribute to higher unemployment rates compared to native-born populations. Factors include language barriers, credentialling (e.g., work visas), and limited social networks. According to the Bureau of Labor Statistics (2023), the unemployment rate in the United States for foreign born populations 16 years and older in the civilian labor force was 3.6%, which was also the unemployment rate for the total population. When broken down by age, younger foreign born populations were more likely to be unemployed compared to older foreign born populations. Race and ethnicity differences showed that Hispanic or Latino foreign born populations had the highest unemployment rate (4.1%) and Asian foreign born populations had the lowest unemployment rate (2.8%).

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When asked about employment status, most respondents in the Rural West service area indicated they were employed (50.3%) or retired (36.9%), followed by unable to work (5.4%), and unemployed (3.5%) or homemaker (3.0%). When looking at the Hispanic population that responded to the survey, 55.5% were employed, 11.9% unemployed, 12.7% retired, and 9.7% homemaker/student while 50.0% non-Hispanic respondents were employed, 2.3% unemployed, 40.0% retired, and 3.3% homemaker/student.
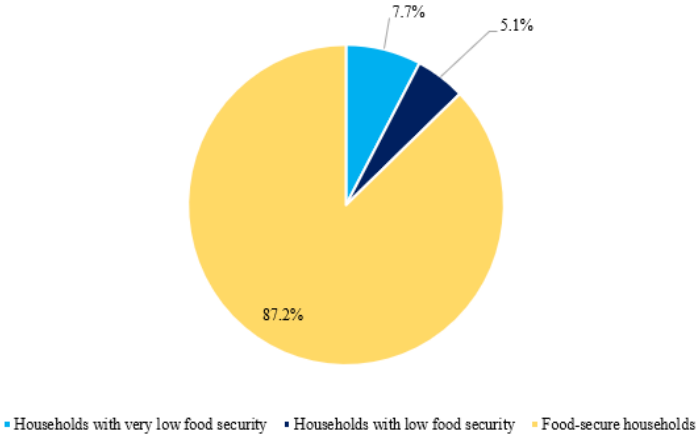
"Industry is a need in the community. Within Carbon County, we do not really have a lot of industry. It affects people being able to work here without having to leave the county."

CHNA Survey Respondents by Employment Status, Rural West Service Area

- Employed
- Homemaker
- Retired
- Student
- Unemployed
- Unable to work

46.2%
38.1%
2.9%
1.1%
3.8%
7.9%

Food Security

Food security, according to the United States Department of Agriculture (USDA), is the lack of consistent access to a variety of foods for a quality diet. A quality diet is one with access to foods that meet the individual's taste and nutritional needs. Very low food security (VLFS) is when normal eating patterns are disrupted and households lack money or other resources to obtain food. The USDA's annual report (2022) found that 12.8% of households nationwide are food insecure, 7.7% of which have low food security and 5.1% have VLFS. Among households with children, 17.3% are food insecure and 1.0% have VLFS. The USDA report stated that households with children facing VLFS had to skip meals or not eat for entire days due to a lack of money for food. In 2022, Pennsylvania had a food insecurity rate of 10.2% and VLFS rate of 4.1%.

Government assistance programs aim to help reduce food insecurity through national programs. The Supplemental Nutrition Assistance Program (SNAP) provides food benefits to low-income families to supplement their food expenses. In the United States (Fiscal Year 2023), an average of 42.2 million people each month were supported with SNAP benefits. Approximately 40% of individuals that participate in SNAP are children, older adults (18%), adults with a disability (9%), adults without disabilities and children in the household (20%), and adults without disabilities and no children in the household (13%). In Fiscal Year 2021, the average monthly SNAP benefit per household in Pennsylvania was $418.16.

U.S. Households by Food Security Status (2022)

7.7%
5.1%
87.2%

- Households with very low food security
- Households with low food security
- Food-secure households

Source: USDA

The National School Lunch Program (NSLP) was established in 1946 and is a federally assisted meal program that supports nutritious low-cost or free lunches to children each school day. To qualify for the NSLP, families must have an income at or below 130% of the poverty level for free lunch and 185% for reduced lunch. In 2022, the NSLP reached an average of 42,169 million children nationwide each day, with a total cost of 113,059 million dollars. During the 2022-2023 school year, 56.6% of students in Pennsylvania were eligible for free or reduced lunch. As of August 2023, Pennsylvania provides free breakfast to all public school students (approximately 1.7 million).

Women, Infants and Children (WIC) is a federal program that supports the nutrition of low-income pregnant and postpartum women, infants, and children younger than 5 years who are at risk for poor nutrition. During Fiscal Year 2023, WIC served approximately 6.6 million qualified individuals each month, including an estimated 39% of all infants in the United States. Services include nutritious foods to supplement a healthy diet, education and information on healthy eating, including breastfeeding promotion and support, and referrals to healthcare and other social services. A total of 391,278 individuals qualified for WIC in Pennsylvania in 2022. Of the individuals that qualified, 40.9% in Pennsylvania participated.

Vulnerable Populations

According to Feeding America, there are more than 1.5 million people in Pennsylvania that are food insecure (11.9%). Among the food insecure population, 49% are above the SNAP threshold, meaning they are ineligible for SNAP benefits. The ALICE population falls into this category, as they make too much to be eligible for services, but not enough to make ends meet. Children and adolescents are impacted by food insecurity at higher rates than any other demographic. Food insecurity for older adults is increasing as well, with 6.6% of the population in Pennsylvania aged 60 years and older being food insecure.

In the Rural West service area counties, Carbon County has a food insecurity rate of 13.1%, and Schuylkill County has a food insecurity rate of 13.4%. It is also important to note that food insecurity affects vulnerable populations in significant ways. When looking at food insecurity by race and ethnicity, 27% of people that identify as Black in Pennsylvania are food insecure compared to 9.0% of White individuals in Pennsylvania. Of people in Pennsylvania that identify as Hispanic or Latino, 25.0% are food insecure.

"I wish that more students would take advantage of our food pantries. There is a stigma around utilizing food pantries because there is a sense of pride that is sometimes hard to overcome."

Black Populations

White Populations
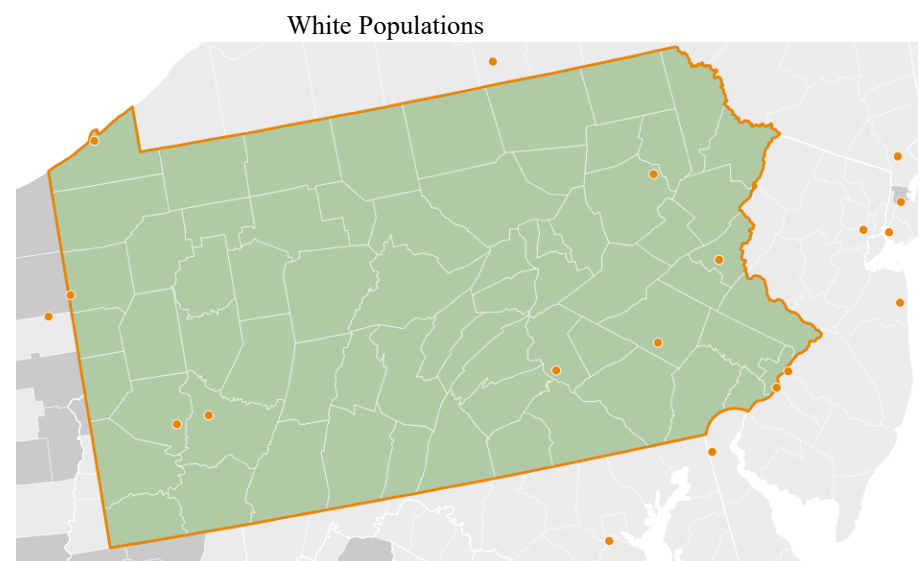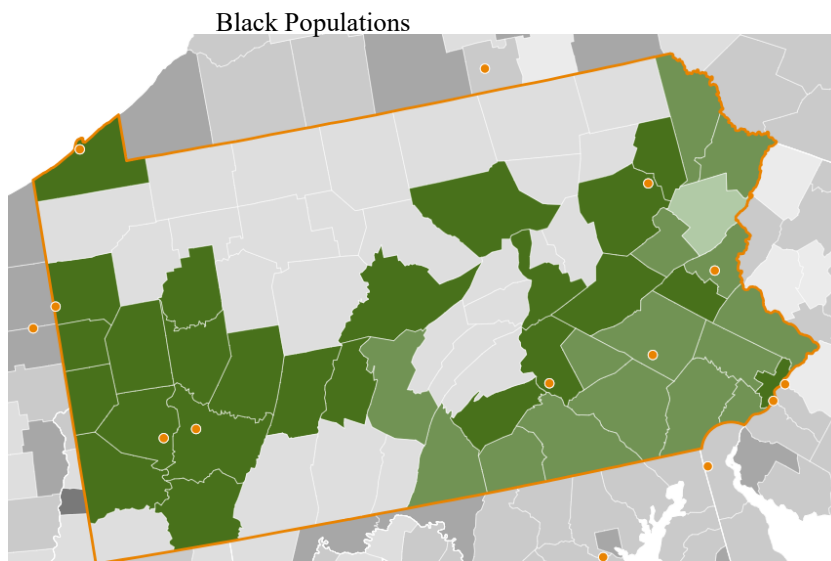
Source: Feeding America

Food Insecurity Rates ⓘ

| No Data | 0-13.0% | 13.1-26.0% | 26.1-39.0% | 39.1-52.0% | 52.1-65% |

Research studies have found that stress from inconsistent access to food can play an active role in fat accumulation and chronic disease. In non-senior adults, food insecurity is associated with decreased nutrient intakes, increased rates of mental health problems, hypertension, and poor sleep outcomes. In children, food insecurity is associated with increased risks of asthma, lower nutrient intakes, cognitive problems, aggression, and anxiety. Food insecure children may also have higher risks of hospitalization, poor overall health, asthma, depression, and worsened oral health. Food deserts also play a role in food insecurity and chronic disease. Typically, in food deserts, there is a large amount of fast food and corner stores with inexpensive, high calorie food that lacks nutritional value. Long term consumption of unhealthy food can increase likelihood of obesity, type 2 diabetes, heart disease, and other diet-related conditions.

Feeding American Food Insecurity Projections					
County/State	2022	2021	2020	2019	2022 Child
Berks	12.1%	9.3%	10.2%	9.4%	16.0%
Bucks	8.8%	6.2%	7.3%	7.2%	9.3%
Carbon	13.1%	11.0%	12.0%	11.7%	19.6%
Lehigh	12.1%	9.4%	10.6%	10.0%	17.0%
Luzerne	14.1%	11.7%	12.9%	12.5%	21.5%
Monroe	11.4%	8.6%	10.4%	9.4%	17.8%
Montgomery	8.6%	6.0%	7.0%	6.9%	9.7%
Northampton	10.7%	7.8%	8.9%	8.6%	13.8%
Schuylkill	13.4%	11.0%	12.3%	12.0%	17.8%
PA	11.9%	9.4%	8.9%	10.6%	16.6%
Hunterdon	6.8%	4.6%	5.5%	5.5%	3.3%
Warren	9.7%	7.6%	8.9%	8.6%	10.1%
NJ	10.7%	8.8%	7.4%	8.6%	13.2%

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Additionally, the percentage of SNAP benefits spent at local farmer's markets was extremely low. Increasing accessibility and educating communities about SNAP use at farmer's markets will help farmers and food insecure families to purchase healthy fruits and vegetables.
The County Health Rankings reports on each county's food environment index, which assess distance to a grocery store, the amount of healthy food options, and cost barriers to healthy food. The measure is ranked 0 to 10, with 10 as the best. In the United States, the average food environment index is 7.7. Pennsylvania's overall food environment index is 8.5. Both Carbon and Schuylkill County have a food environment index of 8.3.

| County Health Rankings Food Environment Index | | |
County	% Limited Access to Healthy Foods	% Food Insecurity	Food Environment Index Score
Berks	3%	9%	8.6
Bucks	4%	6%	9.1
Carbon	2%	11%	8.3
Lehigh	4%	9%	8.4
Luzerne	5%	12%	7.9
Monroe	6%	9%	8.5
Montgomery	4%	6%	9.2
Northampton	5%	8%	8.7
Schuylkill	2%	11%	8.3
Hunterdon	3%	5%	9.6
Warren	8%	8%	8.5

Cost-Burdened Households

According to the department of Housing and Urban Development (HUD), a household is considered cost-burdened if 30% or more of their income goes toward their mortgage or rent. A household is severely cost-burdened if 50% or more of their income goes toward paying a mortgage or rent. Both cost-burdened and severely cost-burdened households face housing instability as well as significant financial strain, limiting their ability to afford other essentials such as food, healthcare, transportation, education, and other expenses. Vulnerable populations (e.g., children, older adults) who face housing instability and move frequently are more likely to face more severe impacts to their mental health, physical health, and overall wellbeing.

Healthy People 2030 recognizes housing instability as a social determinant of health, including negative impacts on physical and mental health. Healthy People 2030 objective to "reduce the proportion of families that spend more than 30% of income on housing" has a target of 25.5%, meaning that of the population nationwide, the goal is to reduce the amount of cost-burdened households to 25.5% by 2030. As of 2021, 35% of households nationwide were cost-burdened.

According to 2024 estimates (Esri), there are a total of 59,364 households and 70,590 housing units, indicating a 14.1% vacancy rate, across the Rural West service area. The majority of both housing and rental units have been occupied prior to 2018, with lower rates of renters occupying the unit for longer than twenty years (1.4%) compared to owner-occupied units (30.3%).

Of the owner-occupied housing units, 53.8% have a single mortgage, 7.2% have multiple mortgages on a single home/unit, and 3.1% have a home equity loan without a mortgage. There are a total of 16,638 rental-occupied housing units in the Rural West service area, with a median gross rent of $943. It is important to note that since the COVID-19 pandemic, housing costs have drastically increased across the nation, and as of 2024 the average rent for an apartment in the Lehigh Valley was $1,426. The lack of affordable housing and low housing stock leads to increase rental and housing costs, which in turn increases the cost-burdened population. The Housing Affordability Index (HAI) measures whether a typical family earns enough income to qualify for a mortgage loan on a median-priced home. The baseline index score of 100 means that a family within the median income has enough income to qualify for a mortgage on a median priced home, assuming a standard mortgage and typical interest rates. An index score above 100 indicates greater affordability, meaning that a typical family earns more that what would be necessary to purchase a median-priced home, and a score of less than 100 indicates that a typical family does not earn enough to afford a median-priced home. In the Rural West service area, the HAI is 95, indicating that a typical family has 95% of the income needed to qualify for a mortgage on a median-priced home.

Occupied Housing Units, Rural West Service Area (Esri Estimates, 2024)

OCCUPIED HOUSING UNITS BY YEAR HOUSEHOLDER MOVED INTO UNIT			
Total	59,364	100.0%	580
Owner occupied			
Moved in 2021 or later	702	1.2%	137
Moved in 2018 to 2020	3,781	6.4%	215
Moved in 2010 to 2017	9,393	15.8%	315
Moved in 2000 to 2009	10,917	18.4%	353
Moved in 1990 to 1999	6,619	11.2%	320
Moved in 1989 or earlier	11,314	19.1%	339
Renter occupied			
Moved in 2021 or later	1,080	1.8%	191
Moved in 2018 to 2020	5,050	8.5%	361
Moved in 2010 to 2017	7,496	12.6%	291
Moved in 2000 to 2009	2,191	3.7%	208
Moved in 1990 to 1999	368	0.6%	117
Moved in 1989 or earlier	449	0.8%	77
Median Year Householder Moved Into Unit	2008		N/A

Rural West Service Area

Economic stability and livable wages are intrinsically connected to housing instability and cost-burdened households. The National Low Income Housing Coalition (NLIHC) released a report on fiscal year 2024's housing costs and wage. Pennsylvania ranks 27th of states with the highest housing wages. In Carbon County, the fair market rent for a two-bedroom apartment is $1,426, meaning the household would need to earn $27.42 an hour or $57, 040 annually to afford the apartment and not be cost-burdened. In Schuylkill County, the fair market rent for a two-bedroom apartment is $858, meaning the household would need to earn $16.50 an hour or $34,320 annually to afford the apartment and not be cost-burdened. In Pennsylvania, the fair market rent for a two-bedroom apartment is $1,365, meaning that for a household to not be cost-burdened, they must earn $54,164 annually. This translates into an hourly wage of $26.26, however Pennsylvania's state minimum wage is only $7.25 an hour. Someone living on the state minimum wage would need to work 145 hours a week to afford rent each month. The most inexpensive county in the SLUHN service area is Schuylkill, with the fair market rent for a two bedroom at $858 a month, requiring $16.50 an hour to not be cost-burdened. With 31% of people in Pennsylvania renting, paying employees livable wages and providing a market of affordable housing is important to address.

			SLUHN Service Areas Cost-burdened Households for Renters (2022)				
Service Area	Total Households	Median Household Income	Households with Gross Rent 30-34.9% of Household Income (%)	Households with Gross Rent 35-39.9% of Household Income (%)	Households with Gross Rent 40-49.9% of Household Income (%)	Households with Gross Rent 50% + of Household Income (%)	Total% Cost-burdened
Network	380,954	$75,905	8.8%	6.1%	9.2%	23.7%	47.8%
Allentown and Sacred Heart	160,488	$70,441	9.5%	6.1%	9.3%	26.2%	51.1%
Anderson and Easton	141,725	$79,564	9.4%	6.2%	11.1%	21.5%	48.2%
Bethlehem University Hospital	269,313	$77,015	8.9%	6.3%	9.4%	24.6%	49.2%
Geisinger St. Luke's	42,908	$63,891	9.1%	4.3%	6.3%	17.4%	37.0%
Monroe	67,410	$76,766	8.4%	5.5%	9.7%	27.1%	50.7%
Quakertown and Upper Bucks	83,505	$104,045	7.4%	6.0%	7.7%	19.1%	40.1%
Rural West	59,364	$60,125	6.9%	4.7%	7.5%	23.4%	42.5%
Warren	64,409	$86,196	8.2%	6.3%	8.6%	22.3%	45.4%

"Rent is low compared to the cities so we have this population increase of people coming in."

SLUHN Service Areas Cost-burdened Households (HH) for Homeowners (2022)

Service Area	2022 Total HH	2022 Median HH Income	HH with Mortgage: Monthly Owner Costs 30-34.9% of HH Income (%)	HH with No Mortgage: Monthly Owner Costs 30-34.9% of HH Income (%)	HH with Mortgage: Monthly Owner Costs 35-39.9% of HH Income (%)	HH with No Mortgage: Monthly Owner Costs 35-39.9% of HH Income (%)	HHs with Mortgage: Monthly Owner Costs 40-49.9% of HH Income (%)	HH with No Mortgage: Monthly Owner Costs 40-49.9% of HH Income (%)	HH with Mortgage: Monthly Owner Costs 50+% of HH Income (%)	HH with No Mortgage: Monthly Owner Costs 50+% of HH Income (%)	Total % Cost-burdened
Network	380,954	$75,905	4.0%	1.4%	3.0%	1.1%	3.2%	1.2%	5.8%	2.9%	**22.7%**
Allentown and Sacred Heart	160,488	$70,441	3.8%	1.4%	3.2%	0.9%	3.2%	1.4%	5.5%	2.5%	**21.9%**
Anderson and Easton	141,725	$79,564	4.1%	1.0%	2.5%	1.2%	3.3%	1.2%	5.4%	3.0%	**21.7%**
Bethlehem University Hospital	269,313	$77,015	4.0%	1.2%	3.0%	1.0%	3.2%	1.2%	5.7%	2.7%	**22.1%**
Geisinger St. Luke's	42,908	$63,891	2.9%	1.9%	2.4%	1.1%	2.1%	1.0%	4.0%	2.9%	**18.2%**
Monroe	67,410	$76,766	3.8%	0.9%	2.9%	1.1%	4.2%	1.3%	7.3%	3.8%	**25.3%**
Quakertown and Upper Bucks	83,505	$104,045	4.5%	0.9%	3.1%	0.8%	2.7%	1.0%	5.1%	1.9%	**19.9%**
Rural West	59,364	$60,125	3.9%	2.1%	2.3%	1.7%	2.7%	1.4%	6.0%	4.0%	**24.1%**
Warren	64,409	$86,196	4.2%	1.3%	3.0%	1.0%	3.3%	0.8%	5.9%	2.8%	**22.1%**

Asset Limited, Income Constrained, Employed (ALICE) are individuals and households that earn above the Federal Poverty Level, but less than the basic cost of living. ALICE households do not qualify for federal assistance and they often struggle to afford basic necessities such as healthcare, housing, food, childcare, and transportation. The ALICE Household Survival Budget from the United Way (www.unitedforalice.org) represents the minimum income necessary for a household to afford the basic necessities without any extras or savings. The budget includes essential costs such as housing, childcare, food, transportation, healthcare, and technology (e.g., cellular phone). Rent in the SLUHN service area is currently (2024) more than double those rates. With a lack of affordable housing, more households will become cost-burdened and face economic and housing instability. The budget for One Adult, One Child includes cost for one adult and a school-age child, The budget for One Adult, One in Child Care includes costs for an adult and a preschool-age child. The budget for Two Adults, Two in Child Care includes costs for two adults, one infant, and a preschool-age child. "Hourly Wage" shows the full-time wage needed to support each budget.

**ALICE Household Survival Budget, Pennsylvania (2022)**

| Monthly Costs and Credits	Single Adult	One Adult, One Child	One Adult, One Child in Child Care	Two Adults	Two Adults, Two Children	Two Adults, Two Children in Child Care	Single Adult 65+ years old	Two Adults 65+ years old
Housing (Rent)	$543	$515	$515	$515	$650	$650	$543	$515
Housing (Utilities)	$163	$258	$258	$258	$310	$310	$163	$258
Child Care	$0	$279	$745	$0	$559	$1,557	$0	$0
Food	$471	$198	$716	$863	$1,451	$1,282	$434	$796
Transportation	$387	$521	$517	$624	$1,028	$1,022	$325	$500
Health Care	$191	$429	$429	$429	$761	$761	$545	$1,090
Technology	$86	$86	$86	$116	$116	$116	$86	$116
Miscellaneous	$184	$289	$327	$281	$488	$570	$210	$328
Tax Payments	$318	$679	$774	$430	$934	$1,140	$382	$676
Tax Credits	$0	($216)	($217)	$0	($430)	($433)	$0	$0
Monthly Total	$2,343	$3,638	$4,150	$3,516	$5,867	$6,975	$2,688	$4,279
ANNUAL TOTAL	$28,116	$43,656	$49,800	$42,192	$70,404	$83,700	$32,256	$51,348
Hourly Wage	$14.06	$21.83	$24.90	$21.10	$35.20	$41.85	$16.13	$25.67

Rural West Service Area

According to the Joint Center for Housing Studies at Harvard University, 42 million households were cost burdened in 2022, an increase of 1.5 million households from 2021 and a 4.9 million increase since 2019, with almost 80% of the increase since 2019 comprised of renters that were severely cost-burdened. Black and Hispanic populations are almost twice as likely to be cost-burdened compared to White households, with more than half of Black and Hispanic renters cost-burdened.

Cost-burdened housing is a large problem in the St. Luke's service area as wages and housing costs are not always aligned. This can be true for older adults with fixed incomes and retirement or pensions that no longer cover increasing rent and/or cost of living expenses (e.g., food, healthcare). According to America's Health Rankings 2024 Senior Report, of households with at least one person aged 65 years and older, 31.5% in Pennsylvania are cost-burdened, compared to 33.1% nationwide. Children and young adults aged 25 years and younger are the most likely to live in a cost-burdened household (50%). These rates remained relatively steady prior to the COVID-19 pandemic, but recent data and projections show drastic increases in cost-burdened households across the nation and within the SLUHN service areas.

Share of Renters with Cost Burdens (Percent)
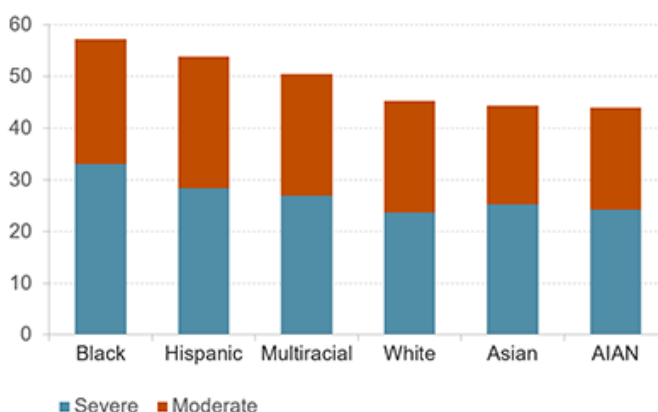
Share of Homeowners with Cost Burdens (Percent)
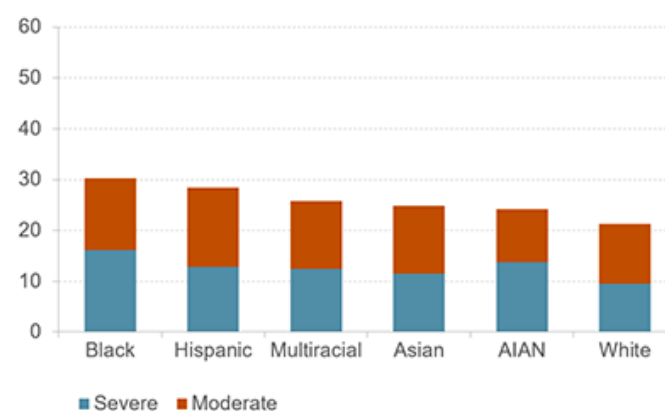
"People cannot afford to buy new homes, especially young couples starting out. The cost of living is growing faster than our wages. Those are the kinds of things we have to deal with."

Health Care Access and Quality

Health care access and quality is a key pillar to maintaining and improving individual and community health. Accessible and equitable healthcare ensures populations receive consistent and appropriate medical care leading to early detection and management of health conditions. Healthy People 2030 outlines objectives for education access and quality related to these issues, including high quality healthcare services, preventative health measures and cost of healthcare. These objectives are designed to address health care access and quality as a social determinant of health, recognizing the economic factors are intrinsically linked to health outcomes.

According to Healthy People 2030, the following objectives are related to health care access and quality and are measured at the national level. Most Healthy People 2030 objectives are core, or measurable, objectives that are related to targets outlined for the decade (2020-2030). Evidence-based interventions are supported through national, state, and local initiatives. Progress is measured using a variety of data sources (e.g., US Census, ACS estimates, state and county data) and is measured using the following indicators: Baseline only, target met or exceeded, improving, little or no detectable change, getting worse. The objectives outlined have corresponding updates at the national level as of June 2024.

Baseline Only: We don't yet have data beyond the initial baseline data, so we don't know if we've made progress.

Target met or exceeded: We've achieved the target we set at the beginning of the decade.

Improving: We're making progress toward meeting our target.

Little or no detectable change: We haven't made progress or lost ground.

Getting worse: We're farther from meeting our target than we were at the beginning of the decade.

| Healthy People 2030 objectives for Healthcare Access and Quality	Baseline	Target	Most Recent Data	Progress
Increase the proportion of adolescents who had a preventative health care visit in the past year (12-17 years old)	78.7% (2016-17)	82.6%	69.6% (2020-21)	Getting worse
Increase the proportion of adults who get screened for colorectal cancer (aged 45-74 years old)	58.7% (2021)	68.3%	—	Baseline only
Increase the proportion of people with a substance use disorder who got treatment in the past year	11.1% (2018)	14.0%	12.2% (2019)	Little or no detectable change
Increase the use of the oral health care system	43.3% (2016)	45.0%	46.2% (2018)	Target met or exceeded
Reduce the proportion of people who can't get medical care when they need it	8.5% (2019)	5.9%	7.0% (2021)	Improving
Increase the proportion of people with health insurance	88.0% (2019)	92.4%	89.8% (2022)	Improving
Increase the proportion of females who get screened for breast cancer (50-74 years old)	76.2% (2019)	80.3%	75.6% (2021)	Little or no detectable change

Access to Care

Access to healthcare is fundamental in ensuring equitable and healthy communities. Healthcare encompasses not only the availability of medical services, but also the affordability, quality, and timeliness of care. Without adequate access, individuals are more likely to experience deteriorating health conditions, which may lead to increased morbidity and mortality rates. Equitable access to healthcare services helps to ensure that individuals have the opportunity to receive preventative care, timely diagnosis, and appropriate treatments. Addressing the social determinants of health (SDOH) and promoting education and prevention can help to reduce long-term healthcare costs and promote the well being and productivity of communities.

Primary Care Providers (PCPs)

Primary care providers (PCPs) are gatekeepers to the healthcare system. Often, they are a patient's first point of contact and referral to further care by specialists. The top performing counties in the United States (90th percentile) have a primary care indicator of 1,030:1, which denotes the ratio of individuals to PCPs. Pennsylvania has an overall ratio of 1260:1, but primary care accessibility in Pennsylvania varies widely based on location, with a range of 2,970:1 (Carbon County) to 770:1 (Montgomery County) in SLUHN service area counties. Schuylkill County has a overall ratio of 1,990:1.

To assess the frequency of visits, the CHNA survey asked respondents when they last visited their PCP. The majority of respondents in the Rural West service area visited their PCP within the last year (92.7%), while 2.3% of respondents had not seen a healthcare provider in the last year, and 1.9% do not have a PCP.

Last Primary Care Physician Visit, Rural West Service Area

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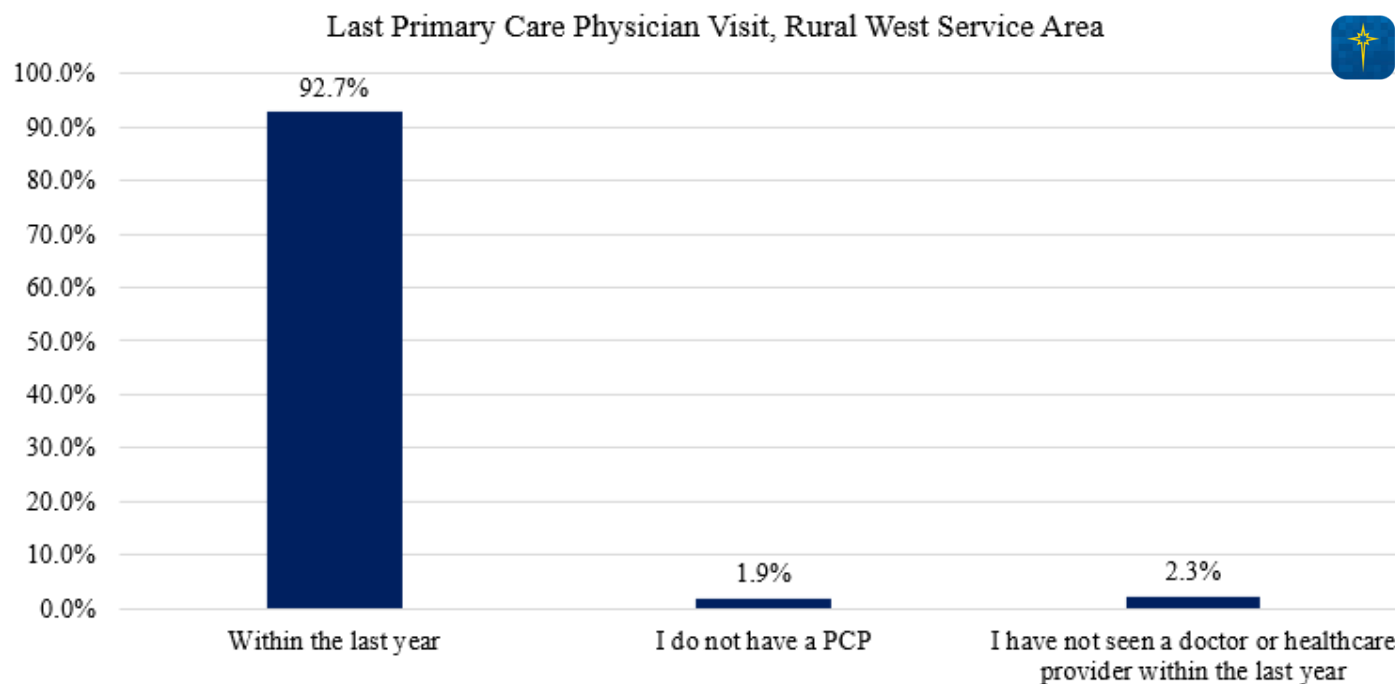
It is important to look at an individual's last visit to a PCP by their type of insurance. Lack of insurance or high copays may hinder individuals from seeking medical attention, which could result in worsened health conditions. Individuals with no insurance coverage or that paid cash were less likely to have a PCP compared to people with any type of insurance coverage. The CHNA survey results show that 76.7% of respondents in the Rural West service area who do not have insurance coverage/pay cash saw a PCP in the last year, compared to 94.3% of respondents with private insurance. Additionally, individuals who do not have insurance/pay cash were the most likely to report that they had not seen a healthcare provider in the last year (16.3%). Respondents who did not know the status of their healthcare coverage (9.1%) or had no coverage/pay cash (13.3%) were the most likely to not have a PCP and more likely to have not seen a doctor in the last year compared to individuals with Medicare, Medicaid, and private insurance. These findings reinforce the importance of health insurance coverage to support routine preventative care through a medical home as well as the need for Federally Qualified Health Centers (FQHC) that offer services on a sliding scale, making medical care affordable to all patients.

Last PCP Visit by Insurance Type, Rural West Service Area
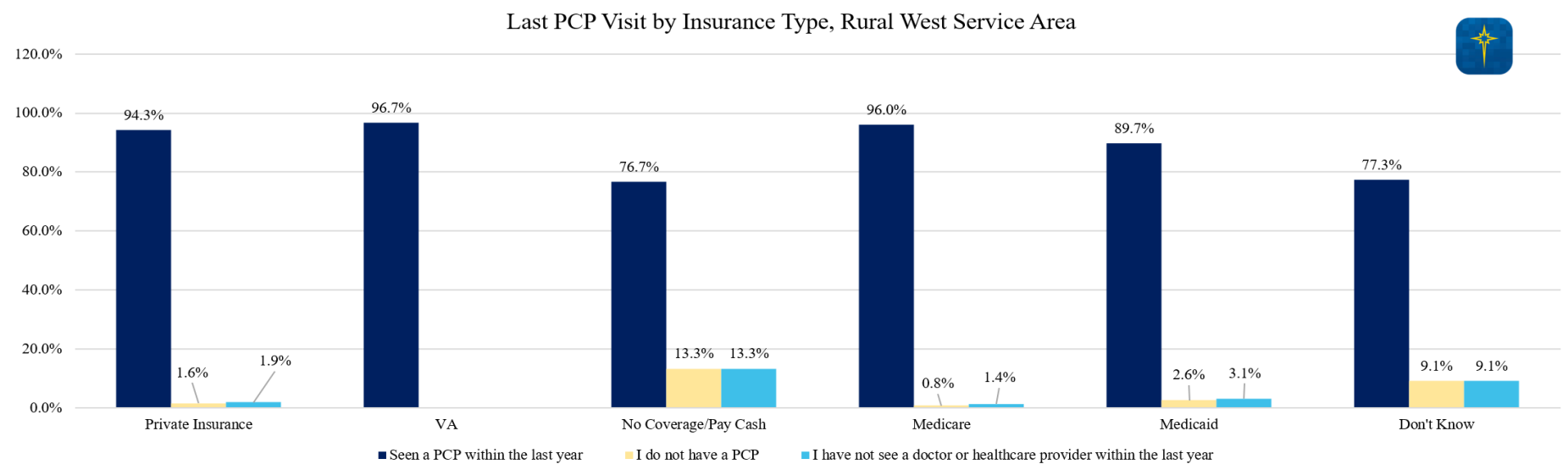
The CHNA survey asks respondents where they go most often when they are sick or in need of medical advice to get an understanding of their use of service providers. The majority of respondents in the Rural West service area go to a doctor's office (74.7%), followed by an urgent care center (14.5%), using the Internet (4.6%), and other (2.3%). While most respondents use a doctor's office, access to PCPs with diverse backgrounds, and that many types of insurances will allow more individuals to seek help at a doctor's office rather than on the Internet or an emergency department.


Last Location of Medical Advice or Care, Rural West Service Area

Rural West Service Area
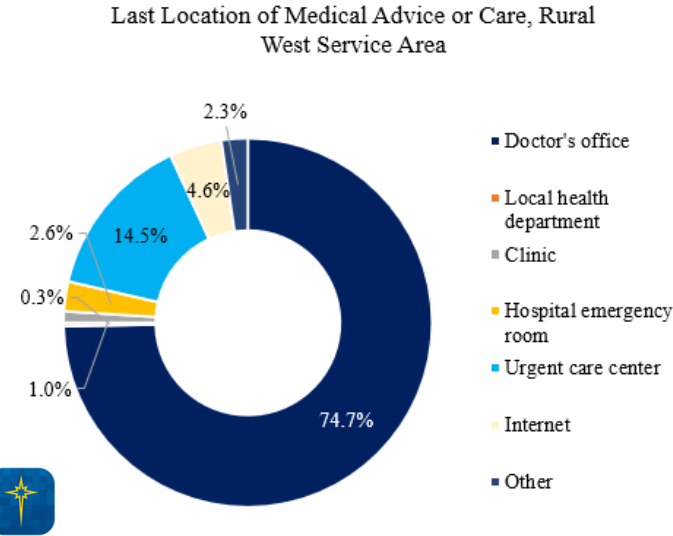
Dentists

The Mayo Clinic refers to dental health as "a window to your overall health." Oral pain can be debilitating, and oral health can affect one's overall daily life, impacting their ability to go to work or school. Poor oral health can also lead to a host of other issues in the body, causing respiratory, digestive, and cardiovascular diseases. Counties listed as top performers in the United States have an overall dental health indicator of 1,180:1, which denotes the ratio of individuals in the population to dentists. In comparison, Pennsylvania has fewer overall dentists at a ratio of 1,400:1 and a much larger range of 2,700:1 to 930:1 in SLUHN service area counties. Carbon County has an overall ratio of 2,420:1 and Schuylkill County has an overall ratio of 2,020:1.

In the 2025 CHNA survey, we assessed the last time respondents visited the dentist and the type of dental insurance that respondents use to gauge the limits of dentist availability and insurance coverage. In the Rural West service area, 60.8% of respondents visited a dentist within the past year and 10.0% do not have a dentist. Additionally, 54.3% of respondents use private insurance for dental care, followed by no insurance (20.2%), Medicaid (10.2%), and Veterans Health Administration (VHA) (0.8%).

Last Dental Visit, Rural West Service Area

(bar chart: "Within the past year" ≈ 60%, "I do not have a dentist" ≈ 10%)
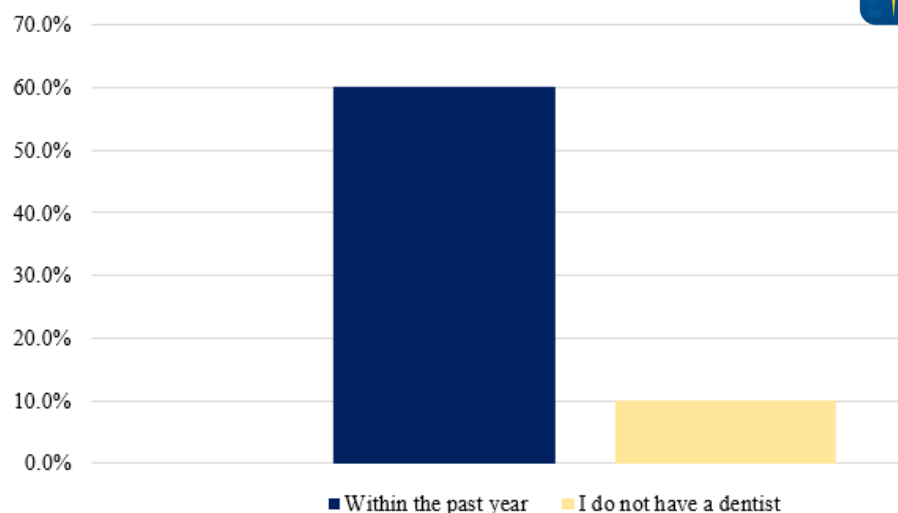
"In these rural communities sometimes you have trouble finding a dentist or do not have good dental insurance. There is a lack of dental care in our area."

Mental Health Providers

Mental health has also been identified as a significant priority for the communities in the St. Luke's service area and the COVID-19 pandemic has greatly impacted access mental health. Access to mental health providers who take multiple kinds of insurance and have availability are needed in our service areas. The ratio of population to mental health providers for the counties listed as top performers in the United States is 270:1. In Pennsylvania the ratio is 450:1. Schuylkill County has a ratio of 970:1 and Carbon County has a ratio of 1,280:1, the highest of SLUHN service areas.

Of the CHNA respondents in the Rural West service area, 15.4% reported having been diagnosed with a mental health concern in the past five years and 13.5% responded that they had seen a mental health provider in the last year. More information on mental health can be found in the Health Behaviors section of this document.
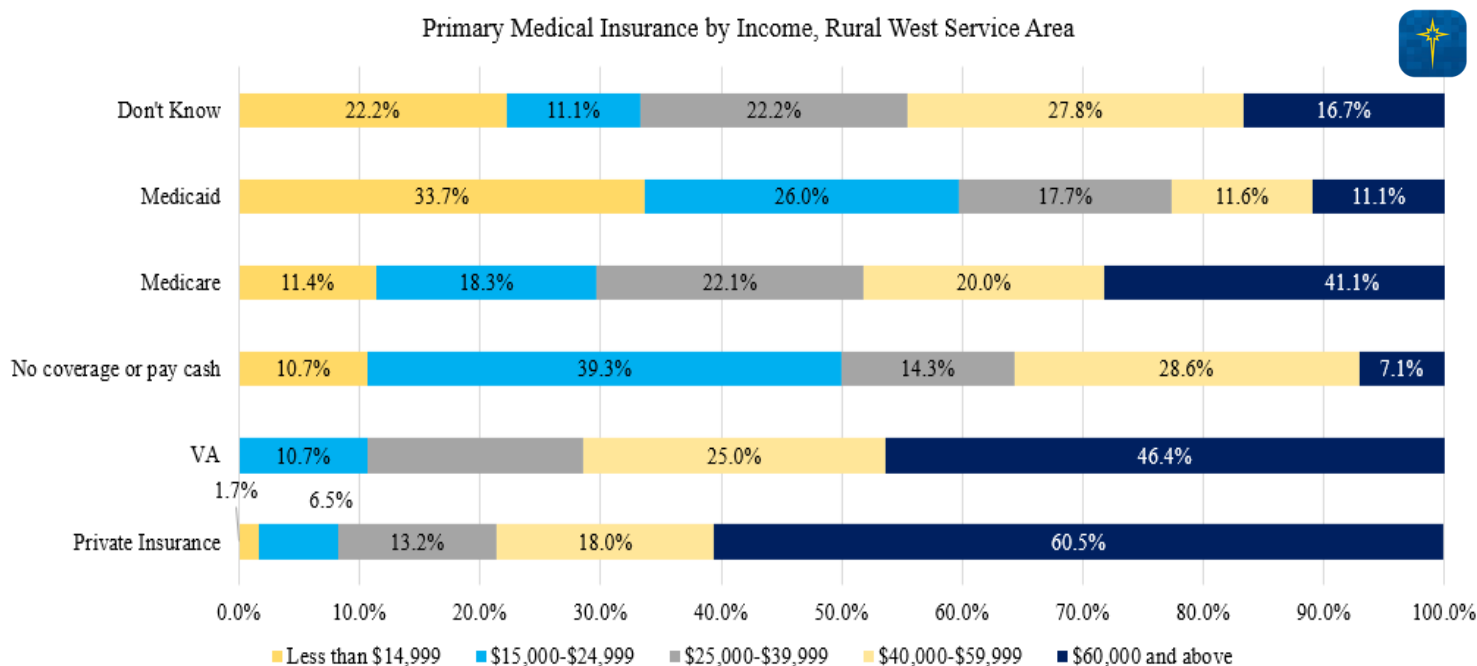
"Our biggest problem is the mental health issues we currently have in the county. We don't have enough mental health providers."

Uninsured rates represent a major barrier in access to care. Often, uninsured patients do not receive preventative care and screenings and get very ill before seeking care, leading to higher medical costs. An issue that is prevalent in many areas is the lack of provider ability to take a range of insurances. Federally Qualified Health Centers (FQHC) and Federally Qualified Health Center– Look Alikes (e.g., Star Community Health) are a crucial component for treating people without insurance or insurance that has minimal coverage. The Health Resources and Services Administration (HRSA) defines a community-based health care provider as one who offers primary care services to underserved areas. FQHCs must provide services on a sliding fee scale based on the patient's ability to pay. Community Health Workers (CHW) are a crucial next step in bridging the health care gap. CHWs are defined as "a frontline public health worker who is a trusted member and/or has an unusually close understanding of the community served." The CHW is the liaison between health and social services and the community. They serve an important role in improving quality of services with cultural competency, increasing health knowledge in the community, and by providing advocacy. CHWs help inform people of the services available, regardless of insurance type or being uninsured, helping to increase access.

Pennsylvania has an uninsured rate of 7%, outperforming the United States, with a rate of 8.8%. Uninsured rates in Carbon County stands at 6% overall and 7% in Schuylkill County. In the Rural West service area, almost no individuals in the aged 65 and older population are uninsured (statistic reports at 0.1%), 3.2% of ages 18 to 64 are uninsured, and 0.4% of children under 18 years old are uninsured. According to CHNA survey results, 3.4% of Rural West service area respondents either have no coverage and pay cash or do not know if they have insurance. Please see the Vulnerable Populations section at the beginning of this document and the subsections throughout that explore health insurance related to other social determinants of health (SDOH).
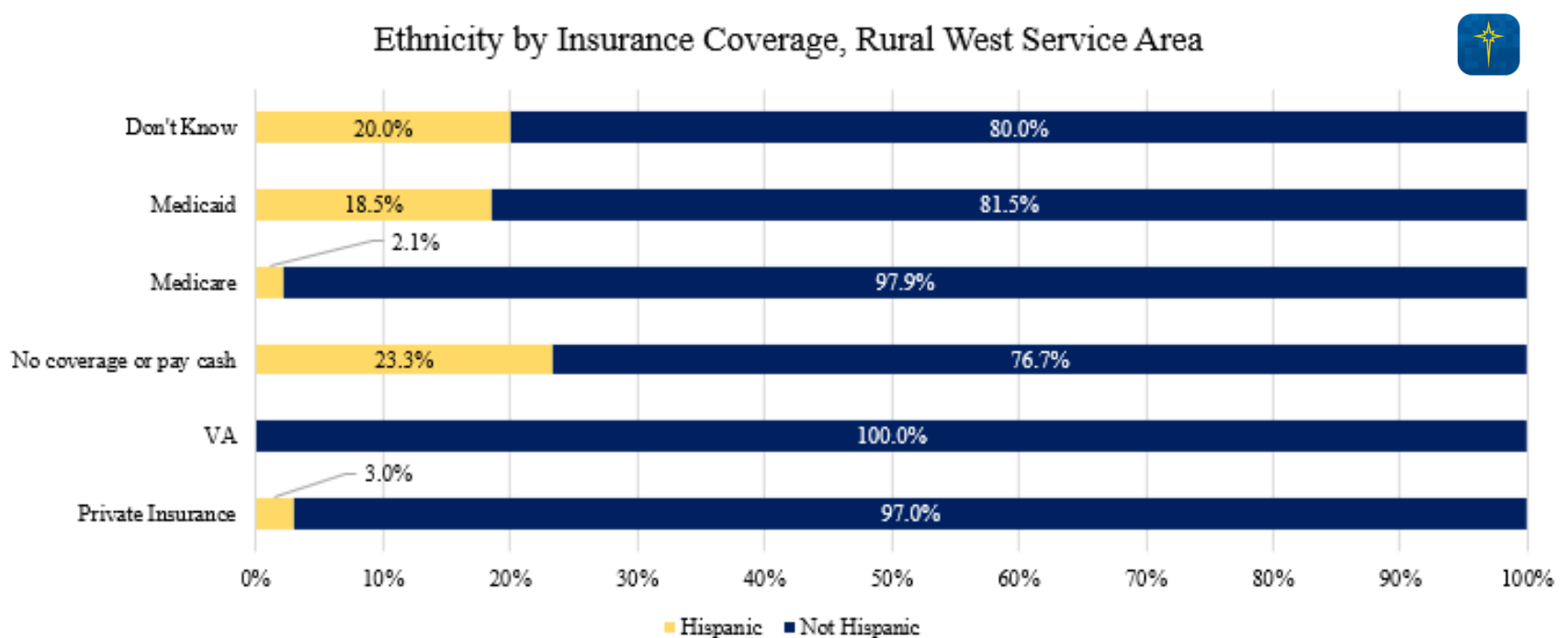
Of the survey respondents in the Rural West service area, those with a household income of less than $14,999 comprise the largest percent of the respondent population that use Medicaid (33.7%) or didn't know their primary insurance (22.2%). Conversely, those whose household income is $60,000 and above comprised the largest percentage of the population that use private insurance (60.5%), Veterans Administration (46.4%), and Medicare (41.1%). These findings reinforce the need for FQHCs in St. Luke's service areas along with doctors who accept Medicaid and uninsured patients.

Primary Medical Insurance by Income, Rural West Service Area

	Less than $14,999	$15,000-$24,999	$25,000-$39,999	$40,000-$59,999	$60,000 and above
Don't Know	22.2%	11.1%	22.2%	27.8%	16.7%
Medicaid	33.7%	26.0%	17.7%	11.6%	11.1%
Medicare	11.4%	18.3%	22.1%	20.0%	41.1%
No coverage or pay cash	10.7%	39.3%	14.3%	28.6%	7.1%
VA		10.7%	25.0%		46.4%
Private Insurance	1.7%	6.5%	13.2%	18.0%	60.5%

Vulnerable Populations

Having access to primary care providers is pivotal for vulnerable populations. Due to the impact social determinants of health (SDOH) have on healthcare, vulnerable populations often experience greater health disparities and higher healthcare costs. The Centers for Disease Control (2021) found that mistrust of the health care system emerged as a primary barrier for BIPOC community members seeking care at healthcare systems. Of the survey respondents in the Rural West service area respondents who did not know what kind of insurance they had, 20.0% were Hispanic while 23.3% that had no coverage/pay cash were Hispanic, and 18.5% of respondents that had Medicaid were Hispanic. These rates are significant given that respondents that identified as Hispanic only accounted for 5.1% of the surveyed population, meaning that Hispanic populations disproportionately account for high rates of Medicaid, no coverage/pay cash, or don't know responses. This may indicate that Hispanic populations have less access to health insurance than the population as a whole.

Financial instability also contributes as a barrier to receiving healthcare. United for ALICE found that ALICE and poverty-level families have more difficulty maintaining health behaviors and preventing illness. When basic needs for health insurance coverage and quality preventative care are not met, recovering from illness or medical emergencies are more challenging.

Ethnicity by Insurance Coverage, Rural West Service Area

Insurance Type	Hispanic	Not Hispanic
Don't Know	20.0%	80.0%
Medicaid	18.5%	81.5%
Medicare	2.1%	97.9%
No coverage or pay cash	23.3%	76.7%
VA		100.0%
Private Insurance	3.0%	97.0%

Legend: Hispanic, Not Hispanic

According to The Federal Reserve Board's Survey of Household Economics and Decision making, 19% of respondents below the ALICE Threshold in Pennsylvania faced an unexpected major medical expense that they had to pay for out of pocket because it was not completely paid for by insurance in 2022, similar to 20% in 2021. The 2024 ALICE report emphasized how medical debt generally reflects poorer health outcomes and lower rates of health coverage. This creates a cyclical effect of financial hardship as lower rates of health care coverage can lead to lower credit scores and additional financial hardships. CHNA survey respondents in the Rural West service area that had a household income between $25,000-$60,000 comprised 50.0% of respondents that didn't know what kind of insurance they had, 29.2% of respondents that had Medicaid, 42.9% of respondents that had no coverage/pay cash, and 31.2% of respondents with private insurance.

The United States Department of Health and Human Services reported on how social determinants of health affect older adults. As the population ages, health care needs can change and become more complex. According to The Administration for Community Living, risk for chronic health conditions like dementia, heart disease, type 2 diabetes, and arthritis increases with age. Most older adults have at least one chronic condition, and many have 2 or more. These conditions can require special care. Although older adults may have more medical needs, many older adults face barriers to getting the care. As an example, older adults living in rural areas will have to travel longer distances to see providers, including specialists. This presents an obstacle if they do not have a means of transportation. The transition from employer-sponsored health insurance plans to Medicare can complicate coverage, potentially requiring a switch in providers. In 2020, adults age 65 years and older spent an average of nearly $7,000 in out-of-pocket medical costs. Although older adults may have more medical needs, many older adults face barriers to getting the care. As an example, older adults living in rural areas will have to travel longer distances to see providers, including specialists. This presents an obstacle, especially if they have limited access to transportation.

Language is also a barrier for healthcare access and quality. According to the 2022 ACS estimates, Hispanic individuals make up 19% of the total U.S. population. Of the Hispanic population in the US, nearly 70% speak Spanish at home. Additionally, 16.8% of Hispanic individuals in the United States have no insurance. Few Spanish-speaking physicians adds to existing language barriers. Only 6% of physicians identify as Hispanic and 2% of non-Hispanic physicians are Spanish-speaking. Patients facing a language barrier are more likely to experience miscommunication and less likely to follow post-appointment instructions or attend follow up appointments.
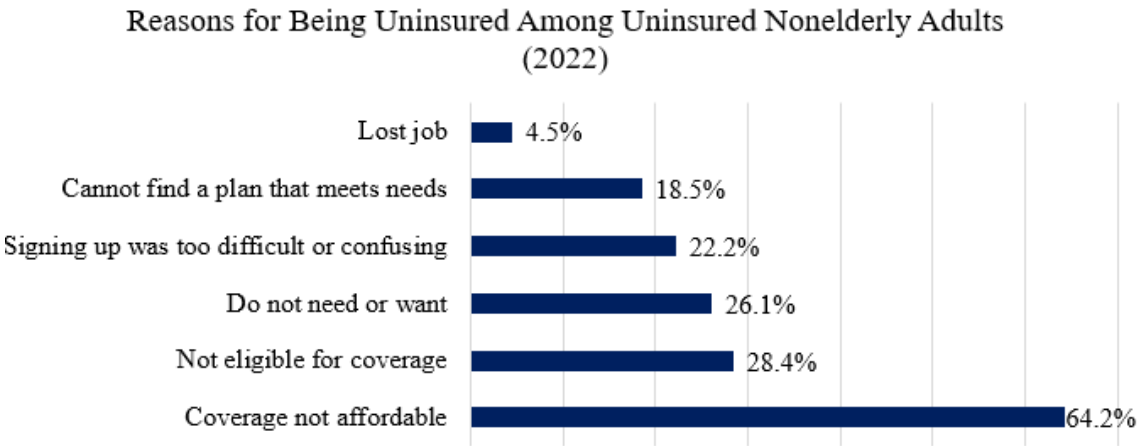
Children and adolescents also face barriers to healthcare. The shortage of pediatric physicians and subspeciality physicians create a challenge to accessing essential healthcare services. The American Academy of Pediatrics found that there has been an increase in the number of pediatric positions offered in the National Resident Matching Program; however, the last 4 years have seen a significant increase in the number of unfilled pediatric positions. Children with special health care needs require trained doctors. Of children in Pennsylvania, 20.8% have special health care needs, including conditions such as cancer, down syndrome, asthma, and depression. Subspeciality shortages mean longer travel distances for families to get care, weeks or months of waiting times to meet with a subspecialist, and going without care or getting care from providers with less specific training.

"Access to healthcare and quality healthcare providers is dire. People are having a hard time moving around to find quality care."

Health insurance plays a role in whether and when people get medical care and where they receive their medical care. Individuals without insurance have less access to care compared to those who are insured. Due to their lack of insurance, uninsured groups are more likely to delay or forgo treatment due to cost concerns. This creates a barrier in receiving preventative care or service for serious health conditions and chronic diseases. The cost of healthcare is increasing so when uninsured individuals seek medical care, they can encounter unaffordable medical bills. The Centers for Medicare and Medicaid Services found that nearly one in five Americans has medical debt. Out-of-pocket spending for health care has doubled in the past 20 years, from $193.5 billion in 2000 to $388.6 billion in 2020. These rising health care costs disproportionately affect vulnerable populations with less resources as mentioned previously. Of the survey respondents in the Rural West service area, 6.0% reported that they missed a doctor's appointment because they did not have health insurance, 14.6% reported the cost (deductible/co-pay) was too high, and 7.7% reported that the doctor/hospital did not take their insurance.

According to the National Health Interview Survey (2022), 25.6 million nonelderly adults in the United States are uninsured. The majority of nonelderly uninsured individuals (64.2%) remain uninsured due to the high cost of insurance premiums, followed by eligibility (28.4%) or that they do not need or want coverage (26.1%). Another significant issue is the lack of awareness or understanding of how to obtain insurance coverage, including eligibility criteria for public assistance (e.g., Medicaid). The majority of nonelderly uninsured people in the United States live in families with income at or below 400% of the Federal Poverty Level (FPL). People of color are also disproportionally uninsured (62.3%) compared to White populations (37.7%). Hispanic populations comprise 40% of the uninsured nonelderly population. Of the families with nonelderly uninsured adults, 73.3% had at least one full-time worker in their household, 10.9% had part-time workers, and 15.8% had no one in their household working.

Reasons for Being Uninsured Among Uninsured Nonelderly Adults (2022)

Lost job — 4.5%
Cannot find a plan that meets needs — 18.5%
Signing up was too difficult or confusing — 22.2%
Do not need or want — 26.1%
Not eligible for coverage — 28.4%
Coverage not affordable — 64.2%

Source: KFF analysis of National Health Interview Survey, 2022

Characteristics of the Nonelderly Uninsured (2022)

15.8%
10.9%
73.3%

No workers — Part-time workers — One or more full-time worker

Source: KFF analysis of National Health Interview Survey, 2022

Rural West Service Area
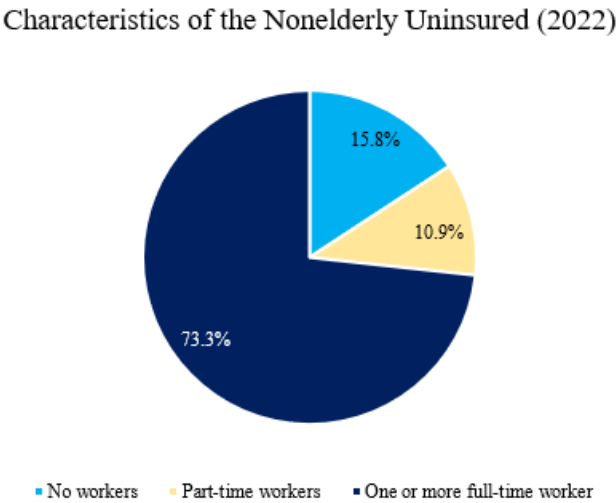
Hospital Data

St. Luke's is one of two major health networks in the Lehigh Valley with a variety of health services ranging from behavioral health to cardiology to gastroenterology and more. St. Luke's addresses the inequities in our service area through partnerships with nonprofits, schools, and businesses. Through these partnerships we implement enhanced care, health initiatives, support, and outreach for health education, healthy lifestyles, and preventative care.

When asked to indicate reasons for any recently missed medical appointments, the top three reasons reported in the Rural West service area were: share of cost was too high (14.6%), insurance did not cover what I need (13.0%), and could not get an appointment (10.6%). Only 1.1% of respondents indicated their reason for missing an appointment was due to the hospital not taking their insurance. These findings further reinforce the need for more comprehensive health insurance and facilities that offer assistance or sliding scales to lessen the financial burden of taking care of one's health. In order to better support our service area population, St. Luke's provides charity care to help alleviate some of the financial burden. In FY23, St. Luke's reported $408 million of IRS defined community benefit spending, approximately 16% of the Network's operating expenditures.

Reason for Missed Medical Appointment, Rural West Service Area

Reason	Percentage
Other reason	4.3%
I have never missed an appointment	51.1%
Did not think the problem was serious	8.4%
Could not get time off from work	9.0%
Did not have someone to watch child/parent	3.1%
Could not get an appointment	10.6%
Did not know where to go	2.2%
Did not have a way to get there	6.9%
Hospital would not take my insurance	1.1%
Doctor would not take my insurance	6.0%
My share of cost was too high	14.6%
Insurance did not cover what I need	13.0%
Did not have health insurance	6.0%

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Rural West Service Area

Top Reasons for Hospitalizations

Hospital data helps us to better understand the major health issues in our community. This allows us, from both a treatment and prevention stand-point, to focus efforts on priority areas most affecting the health of our patient population. The top 10 reasons for hospitalization in the Rural West are listed in the table below. Sepsis is the most common diagnosis during an inpatient encounter; accounting for 9.8% of Rural West total patient encounters. During the 2020 pandemic, COVID-19 was been ranked as the tenth highest cause for an inpatient encounters, and has increased to the fifth highest cause for inpatient hospitalization Network-wide (2023).
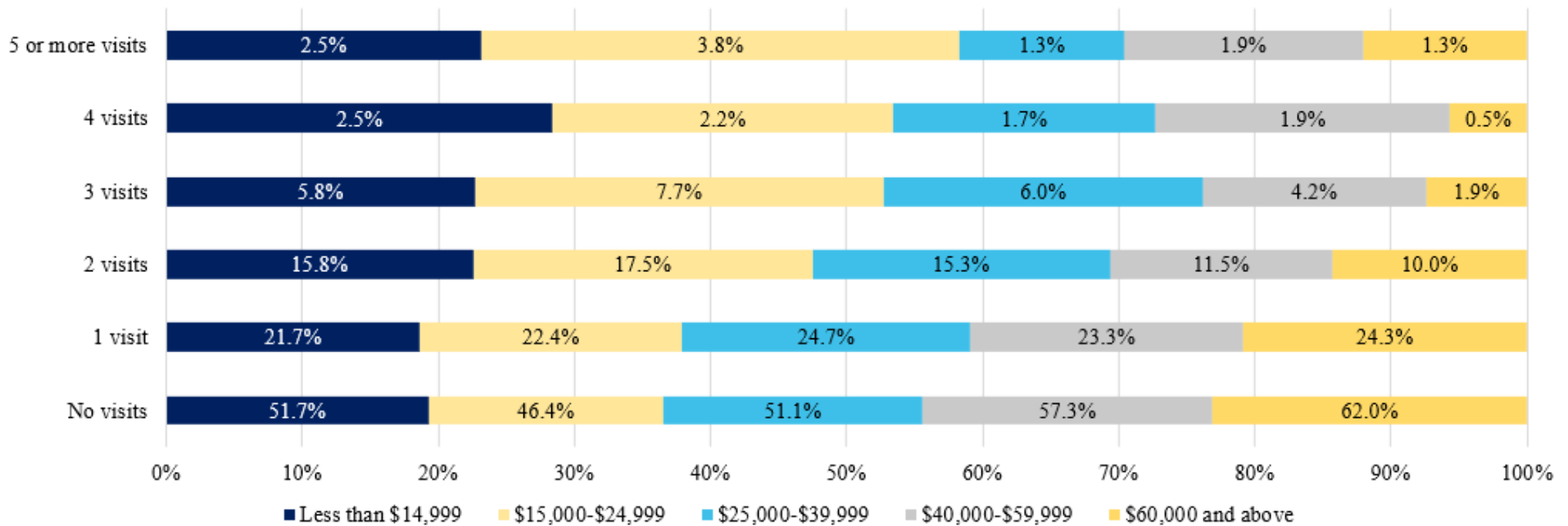
FY23 SLCA & SLL & SLM Top 10 Inpatient Principal Diagnoses			
Ranking	Principal Diagnosis	Inpatient Admissions	% of Total SLCA & SLL & SLM Inpatient Admissions (n=6,995)
1	Sepsis, unspecified organism	684	9.8%
2	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	263	3.8%
3	Acute kidney failure, unspecified	242	3.5%
4	Major depressive disorder, recurrent severe without psychotic features	157	2.2%
5	Emergency use of U07.1 | COVID-19	153	2.2%
6	Hypertensive heart disease with heart failure	142	2.0%
7	Other specified sepsis	141	2.0%
8	Pneumonia, unspecified organism	90	1.3%
9	Chronic obstructive pulmonary disease with (acute) exacerbation	82	1.2%
10	Acute respiratory failure with hypoxia	82	1.2%
	Total	**2,036**	**29.1%**

Emergency Department Encounters

In Fiscal Year 2024, the most common type of insurance for Emergency Department (ED) encounters at the St. Luke's Carbon Hospital was Managed Medicaid, Medicare, and private insurance. The most common primary treatment encounters were abdominal pain, falls, and chest pain. At the St. Luke's Miners Hospital, the most common type of insurance for ED encounters were Managed Medicaid, Medicare, and Medicare advantage. The most common primary treatment encounters were abdominal pain, chest pain, and falls. ED utilization can be used as an indicator to gauge lack of PCP coverage. When comparing ED visits by household income, 48.3% of survey respondents in the Rural West service area who make less than $15,000 visited the ED at least once compared to 38.0% of respondents who make $60,000 and above. Additionally, respondents who make less than $25,000 were more likely than those making more than $25,000 to visit the ED five or more times in a year. Connection to care for low income households, especially connection to a medical home (i.e., primary care physician) is critical in reducing the overutilization of acute care settings for routine medical care.

ED Visits by Household Income, Rural West Service Area

Visits	Less than $14,999	$15,000-$24,999	$25,000-$39,999	$40,000-$59,999	$60,000 and above
5 or more visits	2.5%	3.8%	1.3%	1.9%	1.3%
4 visits	2.5%	2.2%	1.7%	1.9%	0.5%
3 visits	5.8%	7.7%	6.0%	4.2%	1.9%
2 visits	15.8%	17.5%	15.3%	11.5%	10.0%
1 visit	21.7%	22.4%	24.7%	23.3%	24.3%
No visits	51.7%	46.4%	51.1%	57.3%	62.0%

Legend: ■ Less than $14,999 ■ $15,000-$24,999 ■ $25,000-$39,999 ■ $40,000-$59,999 ■ $60,000 and above

Vulnerable Populations

Uninsured populations are especially vulnerable to high rates of hospitalizations and emergency department encounters. Emergency department visits are preventable when patients seek treatment for conditions that could have been managed in non-emergency settings or avoided with consistent and quality preventive care. Factors influencing the rate of these visits include income, education, employment, health insurance coverage, transportation access, and internet access. Utilizing emergency departments for preventable care can lead to excess costs for taxpayers, increase the burden on healthcare providers, and reduce the quality of patient care.

Unhoused and homeless populations frequently utilize emergency departments as a primary source of healthcare. This is often due to lack of insurance and/or a medical home (e.g., primary care physician), lack of transportation, and unstable living conditions which can contribute to higher rates of acute and chronic health conditions. According to the Department of Housing and Urban Development (HUD), it was estimated that approximately 30% of homeless individuals had at least one emergency department visit in 2022. The National Institute of Health reports that homeless individuals are five times more likely to visit the emergency department than housed individuals. According to the CDC, the rate of persons not experiencing homeless has remained relatively stable at less than 50 visits per 100 persons per year compared to much higher rates in homeless populations, with drastic increases between 2010-2021 (see table below). Of the CHNA respondents that reported being homeless in the Rural West service area, 43.6% reported visiting the emergency department at least once in the past year.

Rate of Emergency Department Visits, by Homeless Status, United States (2010-2021)
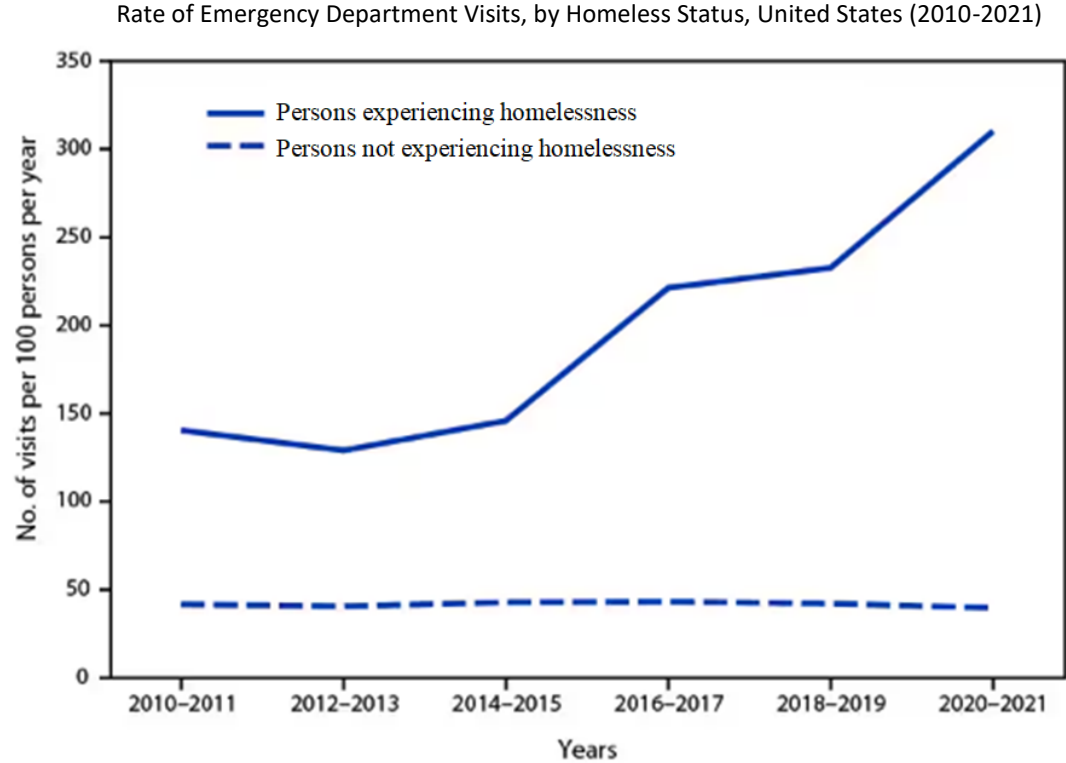
Source: CDC, 2023

Neighborhood and Built Environment

Neighborhood and built environment is the foundation for individual and community health, influencing access to resources, social interactions, and overall quality of life. Unsafe environments can lead to chronic stress, poor mental health, and limited access to healthcare, which can lead to negative health outcomes. Healthy People 2030 focuses on improving health and safety in the places where people are born, live, learn, work, play, worship, and age. These objectives are designed to address neighborhood and built environment as a social determinant of health, recognizing the economic and societal factors are intrinsically linked to health outcomes.

According to Healthy People 2030, the following objectives are related to neighborhood and built environment and are measured at the national level. Most Healthy People 2030 objectives are core, or measurable, objectives that are related to targets outlined for the decade (2020-2030). Evidence-based interventions are supported through national, state, and local initiatives. Progress is measured using a variety of data sources (e.g., US Census, ACS estimates, state and county data) and is measured using the following indicators: Baseline only, target met or exceeded, improving, little or no detectable change, getting worse. The objectives outlined have corresponding updates at the national level as of June 2024.

Baseline Only: We don't yet have data beyond the initial baseline data, so we don't know if we've made progress.

Target met or exceeded: We've achieved the target we set at the beginning of the decade.

Improving: We're making progress toward meeting our target.

Little or no detectable change: We haven't made progress or lost ground.

Getting worse: We're farther from meeting our target than we were at the beginning of the decade.

| Healthy People 2030 objectives for Neighborhood and Built Environment	Baseline	Target	Most Recent Data	Progress
Reduce the rate of minors and young adults committing violent crimes (10-24 years old)	249.0 per 100,000	199.2	—	Baseline only
Reduce the proportion of families that spend more than 30 percent of income on housing	34.6% (2017)	25.5%	35.0% (2021)	Little or no detectable change
Increase the proportion of smoke-free homes	86.5% (2014-15)	92.9%	90.0% (2018-19)	Improving
Increase the proportion of people whose water supply meets Safe Drinking Water Act regulations	90.2% (2018)	92.1%	92.2% (2021)	Target met or exceeded
Reduce the number of days people are exposed to unhealthy air (Air Quality Index)	4,295,962,018 (2016-2018)	3,866,365,816	4,534.737,587 (2019-2021)	Little or no detectable change
Reduce asthma attacks	41.5% (2019)	35.1%	43.4% (2022)	Little or no detectable change
Reduce the amount of toxic pollutants released into the environment	1,970,088 tons (2017)	1,862,612 tons	1,690,240 tons (2019)	Target met or exceeded

Safety

Perceived safety is an important component of integrating into one's community. People who do not feel safe in their neighborhood are less likely to participate in outdoor activities and are more likely to isolate themselves, which can have negative impacts on both physical and mental health. Violent crime, defined as "offenses that involve face-to-face confrontation between a victim and a perpetrator, including homicide, rape, robbery, and aggravated assault", is one measure of safety. According to the Federal Bureau of Investigation (2022), the U.S. rate of violent crime offenses is 380.7 per 100,000 population and Pennsylvania has a rate of 279.9 violent crime offenses per 100,000 population..

Most CHNA survey respondents in the Rural West service area agreed that their community was a safe place to live (48.1%), followed by strongly agree (30.5%), neither agree nor disagree (15.7%), disagree (1.8%), and strongly disagree (0.9%).

Safe parks can provide access to recreational opportunities, reduce crime, and provide environmental benefit by reducing air and water pollution. The Centers for Disease Control found that people who have more access to green environments, such as parks, and trails tend to walk and be more physically active compared to those with limited access. The closer people are to parks, the more likely they are to walk or bike there and use it for physical activity. However, location is not the only factor in accessibility to parks. People must also feel safe in their local parks and have safe neighborhoods.
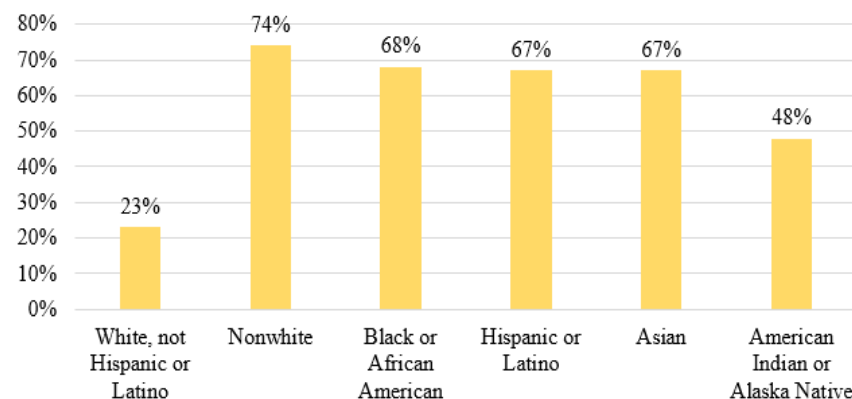
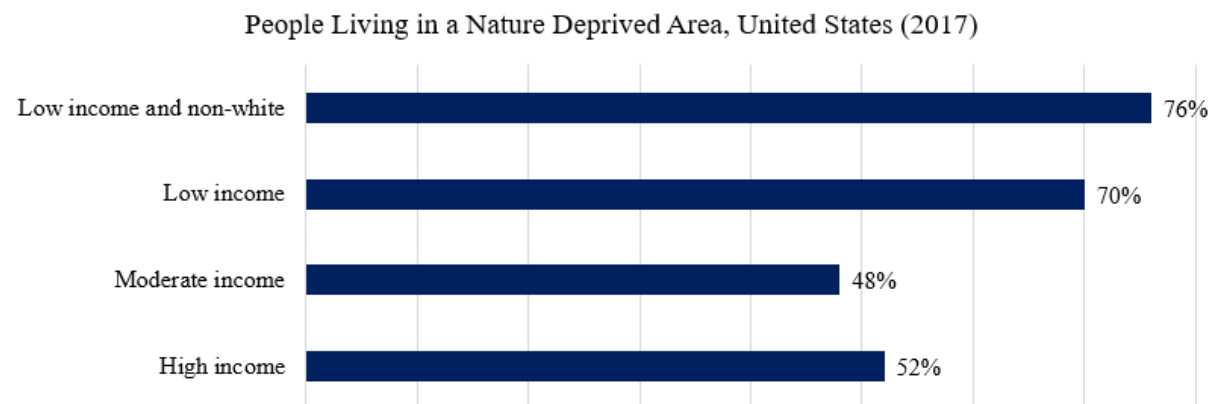**My Community is a Safe Place, Rural West Service Area**

- Strongly agree: 30.5%
- Agree: 48.1%
- Neither agree or disagree: 15.7%
- Disagree: 4.8%
- Strongly disagree: 0.9%
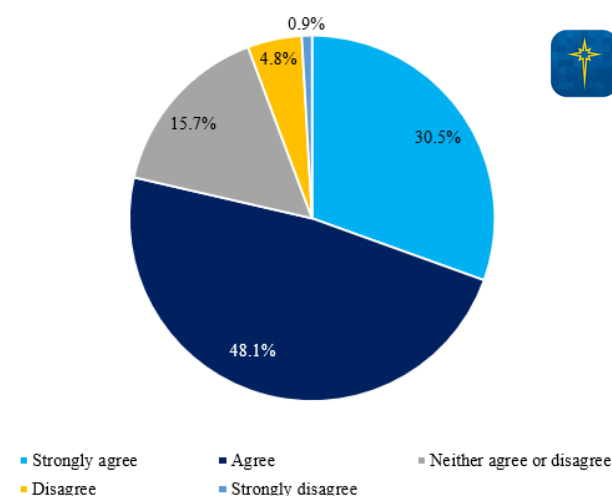
Vulnerable Populations

The National Health Foundation reported that lower-income communities and urban areas experience the most limited access to green spaces. Accessibility varies greatly across neighborhoods, income levels, and race. Having unsafe communities or living far distances from local parks pushes people to travel elsewhere for recreational opportunities and environmental benefit. Finding different spaces for these opportunities creates a barrier due to cost of travel and expense of the activity. The U.S. Forest Service, National Park Service, and Fish and Wildlife Service show that although people of color make up nearly 40 percent of the total U.S. population, close to 70 percent of people who visit national forests, national wildlife refuges, and national parks are white. Black individuals remain the most underrepresented group in these spaces. Costs of camping gear, entrance fees, lack of vacation days, unpaid leave are factors that contribute to the difficulty families face to participate in outdoor recreation, especially BIPOC individuals who are more likely to face these economic barriers.

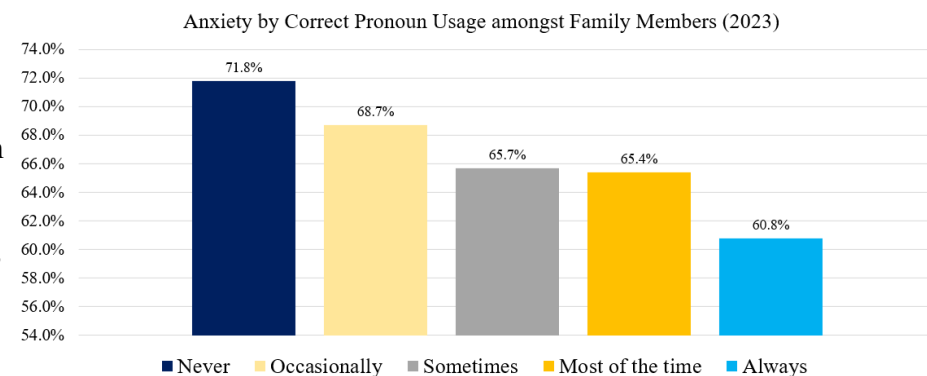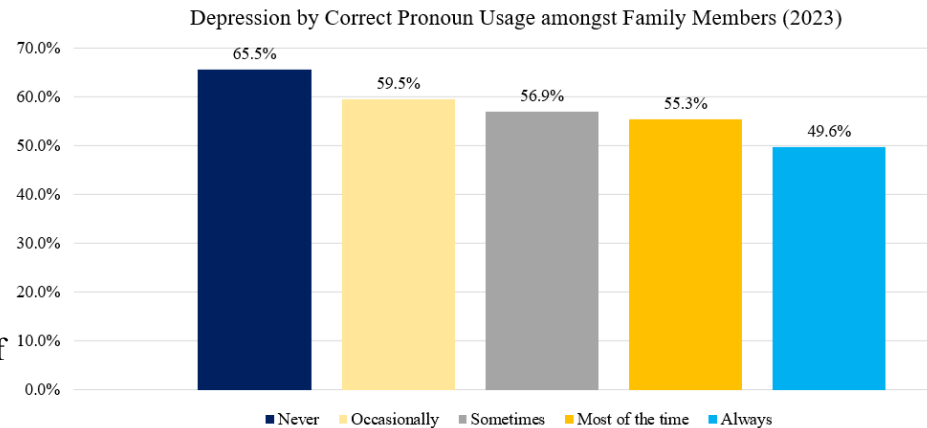**People Living in a Nature Deprived Area by Race/Ethnicity, United States (2017)**

- White, not Hispanic or Latino: 23%
- Nonwhite: 74%
- Black or African American: 68%
- Hispanic or Latino: 67%
- Asian: 67%
- American Indian or Alaska Native: 48%

Source: National Health Foundation, 2017

People Living in a Nature Deprived Area, United States (2017)

Low income and non-white	76%
Low income	70%
Moderate income	48%
High income	52%

Source: National Health Foundation, 2017

LGBTQ+ individuals can feel unsafe in their neighborhoods and built environment due to discrimination, lack of acceptance, and potential threats of violence or harassment. These circumstances can lead to feelings of isolation and vulnerability. The Human Rights Campaign Foundation (HRCF) conducted a 2023 LGBTQ+ Youth Report partnered with the University of Connecticut to survey LGBTQ+ youth from across the United States. The 2023 HRC report found that 82.7% of youth surveyed have disclosed their LGBTQ+ sexual orientation and/or gender identity (SOGI) to at least one member of their immediate family. Transgender and gender expansive youth surveyed were less likely to be out to their families (67.4%) compared to their LGBTQ+ counterparts (80.1%). Almost two-thirds (63.1%) of LGBTQ+ youth reported at least one positive experience of parental support. Seven in ten (72.1%) transgender and gender-expansive youth who report their families never refer to them with the correct name screened positive for anxiety, compared to six in ten (61.9%) whose families always use the correct name.
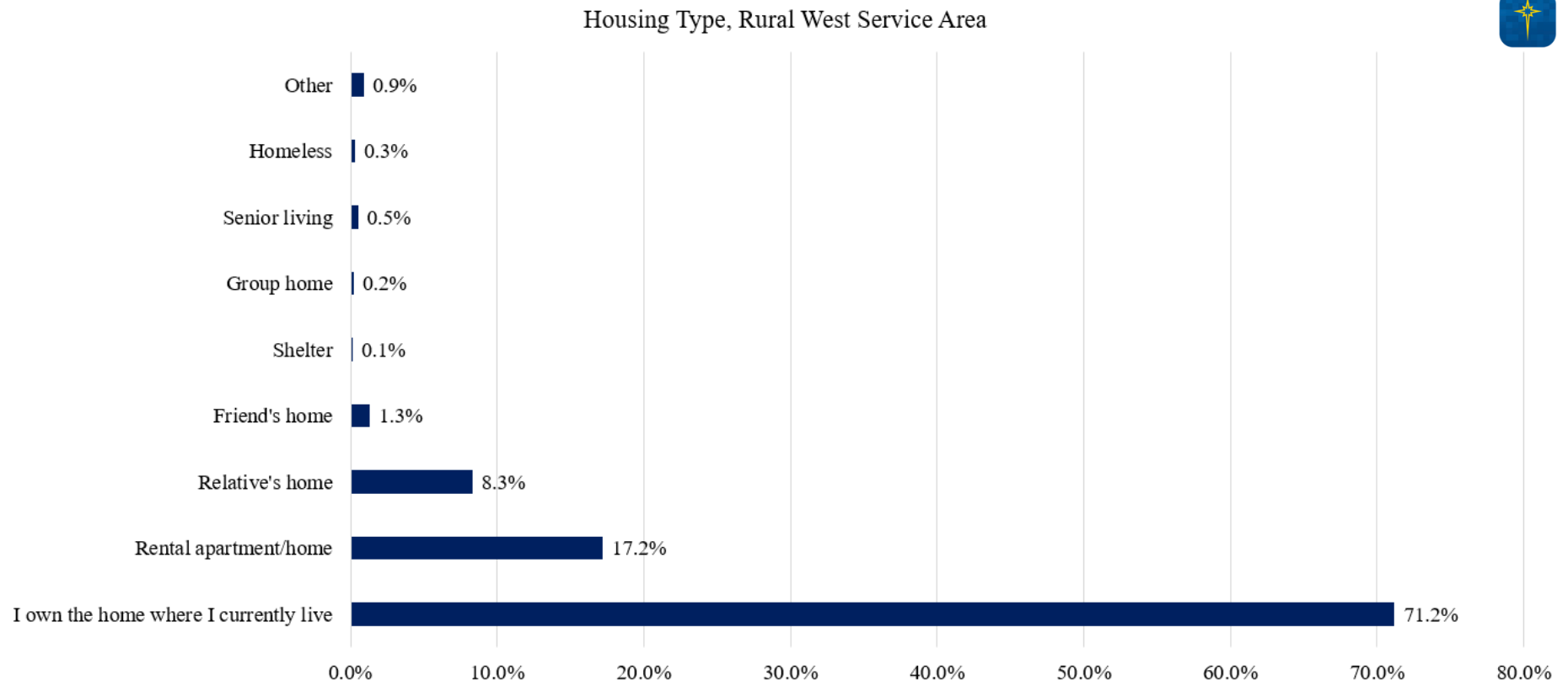
The Youth Risk Behavior Surveillance System (YRBSS) by the Centers for Disease Control (CDC) measures health-related behaviors and experiences that can lead to death and disability among youth and adults. The 2021 High School Youth Risk Behavior Survey found that 6.6% of respondents were threatened or injured with a weapon on school property, 18.3% were in a physical fight, 19.9% saw someone get physically attacked, beaten, stabbed, or shot in their neighborhood, and 8.6% did not go to school because they felt unsafe at school or on their way to or from school.

Depression by Correct Pronoun Usage amongst Family Members (2023)

Never	Occasionally	Sometimes	Most of the time	Always
65.5%	59.5%	56.9%	55.3%	49.6%

Anxiety by Correct Pronoun Usage amongst Family Members (2023)

Never	Occasionally	Sometimes	Most of the time	Always
71.8%	68.7%	65.7%	65.4%	60.8%

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Housing and Blight

Stable and safe housing is an important factor that sets the foundation to achieve quality education, valuable social interactions, and access to nutritious foods. According to Healthy People 2030, safe housing is considered a social determinant of health, or one of the "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." Housing affects other sectors including but not limited to education, health, racial equity, economic stability, homelessness, hunger, crime, the environment, and disability rights. Over time, homeownership can help build wealth and savings, which are important in relation to health; but not everyone has had equal opportunity to own a home. Decades of discriminatory practices has led to a disproportionate homeownership rate between races. Healthy People 2030 has made housing a focus, including efforts to reduce the proportion of families that spend 30% or more of income on housing, increase the proportion of homeless adults who get mental health services, and to increase the proportion of homes that have an entrance without steps to make it accessible for people with disabilities.

To get an understanding of how service area population lives, we asked respondents in the Rural West service area to indicate their housing type. There were a small number of individuals living in a shelter (0.1%), group home (0.2%), senior living (0.5%), homeless (0.3%), or other (0.9%). The majority of respondents own or have a mortgage on their home (71.2%), followed by renting their home (17.2%), living at a relative's home (8.3%), or living at a friend's home (1.3%).

Housing Type, Rural West Service Area

Housing Type	Percentage
Other	0.9%
Homeless	0.3%
Senior living	0.5%
Group home	0.2%
Shelter	0.1%
Friend's home	1.3%
Relative's home	8.3%
Rental apartment/home	17.2%
I own the home where I currently live	71.2%

Rural West Service Area

Two other important metrics to look at are the percentage of households that lack complete kitchens and the percentage of households that lack complete plumbing. It is important to assess the conditions inside houses because they give an indication of living standards and assess the quality of housing facilities. According to the 2021 ACS subject definitions guide, a complete kitchen must possess all the following: a sink with a faucet, a stove or range, and a refrigerator. If a household lacks any one or more of these facilities, the household is considered to lack a complete kitchen. The definitions guide defines a complete plumbing facility to have hot and cold running water and a bathtub or shower. If a household lacks one or both facilities, the house is considered to lack complete plumbing.

The County Health Rankings and Roadmaps measures many social determinants of health, including the percent of people living with severe housing problems. A household is considered to have a severe housing problem if one or more of these conditions is met: lacking a complete kitchen, lacking complete plumbing facilities, house is overcrowded, or the house is severely cost-burdened. A reported 14% of all households in Pennsylvania are considered to have severe problems. In the Rural West service area, Carbon County has 14% of households with severe housing problems and Schuylkill County have 11% of households having severe problems.

Without a complete kitchen, families are unable to cook nutritious meals and may rely more heavily on fast food or take out. For households lacking complete plumbing facilities, families may not be able to bathe regularly leading to poor hygiene. Carbon County had 1.7% of housing units lacking a complete kitchen and 0.3% of housing units lacking complete plumbing. Schuylkill County had 0.7% of housing units lacking a complete kitchen and 0.2% of housing units lacking complete plumbing. The percentage of households lacking complete plumbing and kitchens follows a similar pattern to Pennsylvania and the United States.

Network Service Area (ACS 5 Year Estimates, 2022)			
County	Total Housing Units	% lacking complete kitchen	% lacking complete plumbing
Berks	171,717	1.1%	1.0%
Bucks	257,272	0.6%	0.3%
Carbon	34,394	1.7%	0.3%
Lehigh	151,300	0.6%	0.3%
Luzerne	151,332	1.1%	0.4%
Monroe	79,663	0.7%	0.4%
Montgomery	350,243	0.4%	0.2%
Northampton	129,621	0.4%	0.0%
Schuylkill	67,300	0.7%	0.2%
Hunterdon	51,952	0.7%	0.5%
Warren	46,786	0.3%	0.3%
Pennsylvania	5,815,191	0.8%	0.3%
New Jersey	3,785,097	0.7%	0.3%
United States	143,772,895	0.8%	0.4%

Vulnerable Populations

Homelessness is another important indicator when assessing housing. According to the Pennsylvania Continuums of Care (2024) Point-in-Time Count, there were 2,262 homeless individuals experiencing homelessness in the Eastern Pennsylvania Continuum of Care, with 1,362 in emergency shelters, 408 in transitional shelters, and 492 unsheltered. Of those individuals experiencing homelessness, 191 were chronically homeless, with 130 living in emergency shelters and 61 unsheltered. Of the total homeless population in the Eastern Pennsylvania region, 252 experienced severe mental illness, 65 with chronic substance abuse, 92 Veterans, and 280 victims of domestic violence.

Black, Indigenous, and People of Color (BIPOC) communities are disproportionately affected by housing instability, neighborhood blight, and homeownership opportunities which exacerbates health and economic disparities. Federal homelessness data shows that BIPOC groups in the United States continue to experience sheltered homelessness. According to the U.S. Department of Housing and Urban Development's 2023 Annual Homelessness Assessment Report, people who identify as Black and African American consistently make up the largest BIPOC group experiencing sheltered homelessness (e.g., emergency shelters, transitional housing, hotels). The Black and African American population represents nearly 14% of the total U.S. population, but represent 38.6% of people experiencing sheltered homelessness. There is also disproportionality among smaller minority groups. Native Hawaiians and Pacific Islanders now represent 0.3% of the U.S. population but 1.8% of the sheltered homeless population. Similarly, American Indian/Alaska Natives represent 1.3% of U.S. population but 3.4% of the sheltered homeless population. Similarly, people identifying as Hispanic or Latino make up 19% of the U.S. population, but 21.3% of the sheltered homeless population and 26% of the unsheltered homeless population. Male populations are more likely to be sheltered homeless (66.8%) and unsheltered homeless (69.8%) compared to female sheltered homeless and unsheltered homeless, 31.8% and 28.4%, respectively. While Transgender populations account for 0.6% of the population in the United States, they account for 0.8% of the sheltered homeless population and 0.9% of the unsheltered homeless population.

LGBTQ+ communities are particularly vulnerable to homelessness, housing instability, and blight. Discrimination, societal stigmas, and lack of support contribute to these circumstances. Research done by the Journal of Adolescent Health has shown that those who identify as lesbian, gay, bisexual, transgender, or questioning (LGBTQ+) have a 120% higher risk of experiencing some form of homelessness. The Williams Institute found that up to 40% of the 4.2 million youth identifying as LGBTQ+ experience homelessness compared to their straight and cisgender peers experiencing homelessness (9.5%). LGBTQ+ individuals are also more likely to experience assault, trauma, depression, and suicide when compared to non-LGBTQ+ populations while also being homeless.

Demographic Characteristics of Individuals Experiencing Homelessness (United States, 2023)						
	All Individuals		Sheltered Individuals		Unsheltered Individuals	
	Total	%	Total	%	Total	%
Age	467,020	100%	227,795	100%	239,225	100%
Under 18	3,430	0.7%	1,854	0.8%	1,576	0.7%
18-64 years old	424,557	90.9%	203,984	89.6%	220,573	92.2%
65+ years old	39,033	8.4%	21,957	9.6%	17,076	7.1%
Gender						
Female	140,331	30.0%	72,506	31.8%	67,825	28.4%
Male	319,276	68.4%	152,273	66.8%	167,003	69.8%
Transgender	3,884	0.8%	1,747	0.8%	2,137	0.9%
A Gender that is not singularly female or male	2,858	0.6%	1,063	0.5%	1,795	0.8%
Questioning	671	0.1%	206	0.1%	465	0.2%
Ethnicity						
Non-Hispanic/Non-Latino	356,244	76.3%	179,289	78.7%	176,955	74.0%
Hispanic/Latino	110,776	23.7%	48,506	21.3%	62,270	26.0%
Race						
American Indian, Alaska Native, or Indigenous	18,351	3.9%	6,654	2.9%	11,697	4.9%
Asian or Asian American	10,064	2.2%	3,129	1.4%	6,935	2.9%
Black, African American, or African	150,589	32.2%	87,909	38.6%	62,680	26.2%
Native Hawaiian or Pacific Islander	7,045	1.5%	1,877	0.8%	5,168	2.2%
White	255,874	54.8%	118,862	52.2%	137,012	57.3%
Multiple Races	25,097	5.4%	9,364	4.1%	15,733	6.6%

Each school year, the Pennsylvania Education for Children and Youth Experiencing Homelessness Program records the number of homeless students served by the program. The population includes children under the age of 5 and youth enrolled in pre-K through 12th grade. The unique count is based on where the child was identified as homeless and attributed to the local education agency. Of the counties that house St. Luke's hospitals in Pennsylvania, 8,489 students were identified as homeless in the 2021-2022 school year. This number does not encompass the entire child homeless population as it does not include children who were not served by this program (i.e., students not in the Pennsylvania public school system).

ALICE individuals face significant challenges related to housing stability, neighborhood blight, and homeownership opportunities, which can contribute to short and long-term financial instability. The 2024 United for Alice Report Update showed an increase in the number of ALICE households in Pennsylvania. Between 2010 and 2022, the total number of households in the state increased by 7%, households in poverty increased by 5%, and the number of ALICE households increased by 19%. In 2022, 12% (658,448) of all households were below the Federal Poverty Line, and 28% (1,493,199) of all households were ALICE. That combines to a total of 41% (2,151,647) of households struggling to make ends meet, and also do not qualify for many federal assistance programs.

PA SY 2021-22 Homeless Children Pop Identified by the Education for Children and Youth Experiencing Homelessness Program	
County	# of Students
Berks	2,488
Bucks	834
Carbon	60
Lehigh	1,055
Monroe	431
Montgomery	1,617
Northampton	627
Schuylkill	390
Luzerne	987
PA Network Total	8,489

Older adults are particularly vulnerable to the impacts of housing instability and neighborhood blight. Dealing with these challenges can negatively affect their health mobility and overall wellbeing. In January 2023, the annual Point-in-Time Count was reported by 381 Continuums of Care (CoC) conducted nation-wide. Nearly 1 in 4 people experiencing unsheltered homelessness (living in places not meant for human habitation) were over the age of 55. Prior to 2023, there had not been concrete national information on the number of older adults that are experiencing homelessness. Projections done by University of Pennsylvania's Actionable Intelligence for Social Policy estimated that homelessness among older adults is expected to nearly triple in 2030, and the population of adults aged 65 and older experiencing homelessness is anticipated to grow from 40,000 to 106,000. People experiencing homelessness often live with unmanaged chronic disease and limited access to healthcare, their health profiles are commonly associated with those of older individuals. Research done by the Gerontological Society of America shows that people experiencing homelessness aged 50-59 years old have been found to experience geriatric conditions such as memory loss, falls, and functional impairments at rates that compare to members of the general population in the 70 years and older age group.

A study done by Joint Center for Housing Studies at Harvard University on immigrant access to homeownership highlighted the barriers faced when attempting to gain home ownership. Homeownership is a way for lower to middle income individuals to build wealth. Home ownership goes beyond solely financial benefits by fostering greater residential stability, civic engagement, and overall well-being. Home ownership is significant to foreign-born populations since owning a home greatly influences their settlement and life in the United States. Research demonstrated great housing disparities among native and foreign-born households. Foreign-born households experience higher housing cost burdens and face persistently lower homeownership rates. Legal status is another major barrier unique to the foreign-born population that affects access to homeownership.
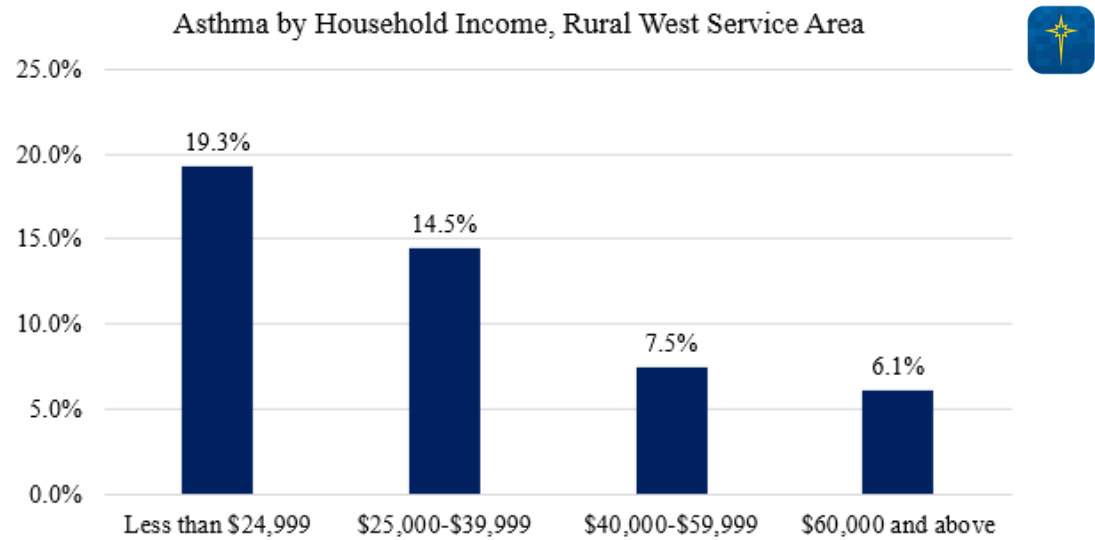
Air and Water Quality

Air quality is a growing concern, especially in urbanized and industrialized areas. Poor air quality can irritate the eyes, nose, and throat, and cause long term negative health effects. Air quality is typically assessed by two components, ozone (O_3) and Particulate Matter (PM). Ozone is a gas molecule that is harmful to breathe and aggressively attacks lung tissue. Ozone is dangerous because it can be carried by wind far downstream, causing harm to people in multiple areas. Ozone can also cause premature death, acute breathing problems, long term exposure risks, and potential cardiovascular harm. PM is a particle that occupies the air we breathe but is small enough that we cannot see it unless there are large amounts of PM in one area. Large amounts of PM result in reduced visibility, or haziness in the air. PM 2.5 is the smallest particle and most dangerous size because it can easily pass through lung tissue and into the blood stream. Breathing PM can trigger illness, hospitalization, and premature death along with increasing the severity of asthma attacks in children. Both pollutants are especially dangerous in vulnerable groups like children and teens, anyone over the age of 65 years old, people with pre-existing lung diseases (e.g., asthma, COPD), and people with cardiovascular diseases. Ozone and PM can both lead to premature death, respiratory harm, and cardiovascular harm. Objectives for environmental health determined by Healthy People 2030 are to increase the proportion of people with safe water to drink, to reduce the amount of toxic pollutants in the environment, and to reduce the number of days people are exposed to unhealthy air. Ozone and PM are measured by the Environmental Protection Agency (EPA), the Department of Environmental Protection (DEP), and reported to the American Lung Association. The American Lung Association released a State of the Air (2024) report based on data collected in 2020-2022 depicting overall air quality with red days being unhealthy, purple days being very unhealthy, and orange days being unhealthy for sensitive groups. DNC stands for "Data Not Collected". Data was not collected on the high particulate matter days or ozone days for Carbon and Schuylkill County.

High Ozone Days	Weight average	Orange days	Red days	Purple Days	High Particulate Matter Days	Weight average	Orange days	Red days	Purple Days
Berks	1.7	5	0	0	Berks	1.0	3	0	0
Bucks	5.3	16	0	0	Bucks	DNC	DNC	DNC	DNC
Carbon	DNC	DNC	DNC	DNC	Carbon	DNC	DNC	DNC	DNC
Lehigh	0.0	0	0	0	Lehigh	0.5	0	1	0
Monroe	0.0	0	0	0	Monroe	DNC	DNC	DNC	DNC
Montgomery	1.7	5	0	0	Montgomery	0.7	2	0	0
Northampton	1.0	3	0	0	Northampton	1.3	4	0	0
Schuylkill	DNC	DNC	DNC	DNC	Schuylkill	DNC	DNC	DNC	DNC
Luzerne	0.0	0	0	0	Luzerne	DNC	DNC	DNC	DNC
Warren	0.0	0	0	0	Warren	0.3	1	0	0
Hunterdon	0.0	0	0	0	Hunterdon	0.0	0	0	0

Note: DNC indicates they did not collect data

Additionally, the community survey asked respondents to indicate if they had ever been diagnosed with asthma. When examined by income, 19.3% of respondents in the Rural West service area who earn less than $24,999 have asthma. The rates of asthma generally decrease as household income increases, with 14.5% of people earning $25,000-$39,999, 7.5% of people earning $40,000-$59,999, and 6.1% earning $60,000 and above. This is an important trend to note as respondents with lower incomes may not have access to air purifiers or live in areas with access to cleaner air.

Asthma by Household Income, Rural West Service Area

Water quality is another important aspect of the environment. Water is delivered in two ways, through wells and through municipalities. Each municipality is required to report water quality reports each year, but well quality is difficult to track because it is typically unregulated and typically owner-maintained. Pennsylvania's Department of Environmental Protection (2023) water report stated that 12% of Pennsylvania households use well water and 88% of households use community water systems. The report tracks violations within the Maximum Contaminant Level (MCL) which is the highest level of contaminant allowed in drinking water. The water is permitted to have some contaminants as long as it does not exceed the MCL. This is important to note because even though a water system does not have violations, it does not necessarily mean the water is completely free of contaminants. The water report also tracks the Maximum Residual Disinfectant Level (MRDL) which limits the amount of disinfectants allowed in safe drinking water. Some of the typical contaminants tested are chlorine, fluoride, radium, turbidity, organic carbon, lead, and copper. Water contaminants can result in a variety of negative health impacts, like gastrointestinal illness, worsened nervous or reproductive systems, and a variety of diseases (e.g., cancer). The effects can also be short term or long term, while also going unseen, potentially worsening the effects over time.

Carbon county is served mostly by well water, but there is data from the Jim Thorpe Borough Water Department. Jim Thorpe West 2023 water reports indicated there were no contaminants that exceeded limits set by the Environmental Protection Agency (EPA). Jim Thorpe East also reported no water quality violations. Schuylkill county residents receive water from the Schuylkill County Municipal Authority (SCMA). The Authority has eight water treatment facilities across the county. The 2023 report concluded there were no MCLs or treatment techniques exceeded. However, SCMA received three incorrect reporting violations, which is considered a monitoring violation, for late reports or incorrectly submitted reports. A treatment technique is a process to reduce the number of contaminants in water While most counties in the St. Luke's service area do not have lead that contaminates drinking water from the source, lead pipes, faucets, and other risks of lead poisoning may exist in homes. Higher prevalence for lead poisoning is found in low income homes.

BIPOC and low-income communities are disproportionately affected by poor air and water quality. Living in areas with higher pollution levels and limited access to access to clean resources contributes to environmental inequities. A 2021 analysis by the United States Environmental Protection Agency showed that the most severe harms from climate change fall disproportionately upon underserved communities since they are the least able to prepare and recover from environmental events like heat waves, poor air quality, and flooding. Key findings of the report showed that Black and African American individuals are projected to feel the impacts of climate change stronger than all other demographic groups. Two degrees Celsius is considered a critical threshold above which dangerous and life-threatening effects will occur for humans and the ecosystem. For example, with 2°C (3.6°F) of global warming, Black and African American individuals are 34% more likely to currently live in areas with the highest projected increases in childhood asthma diagnoses and 40% more likely to currently live in areas with the highest projected increases in extreme temperature related deaths. Hispanic and Latino communities have higher participation in industries that are weather-exposed like construction and agriculture causing increased vulnerability to the effects of extreme temperatures. Hispanic and Latino individuals are 43% more likely to currently live in areas with the highest projected reductions in labor hours due to extreme temperatures.

A 2022 research study done by Harvard T.H. Chan School of Public Health in collaboration with the Environmental Systems Research Institute, created a platform that links 17 years' worth of demographic data with data on fine particulate pollution from across the U.S. Using the platform, research was able to be done on the disparities of air pollution exposure of racial/ethnic and income groups in the United States. It was found that groups that identify as Black and African American, Asian, Hispanic, and low-income populations are being exposed to higher levels of dangerous fine particulate air pollution (PM2.5) than other groups. The researchers also found that areas of the U.S. where the white and Native American populations are overrepresented have been consistently exposed to average PM2.5 levels that are lower than those in areas where Black, Asian, and Hispanic populations are overrepresented. According to the Yale Program on Climate Change Communication (2023), Hispanic and Black adults are alarmed or concerned about global warming at higher rates than White adults.
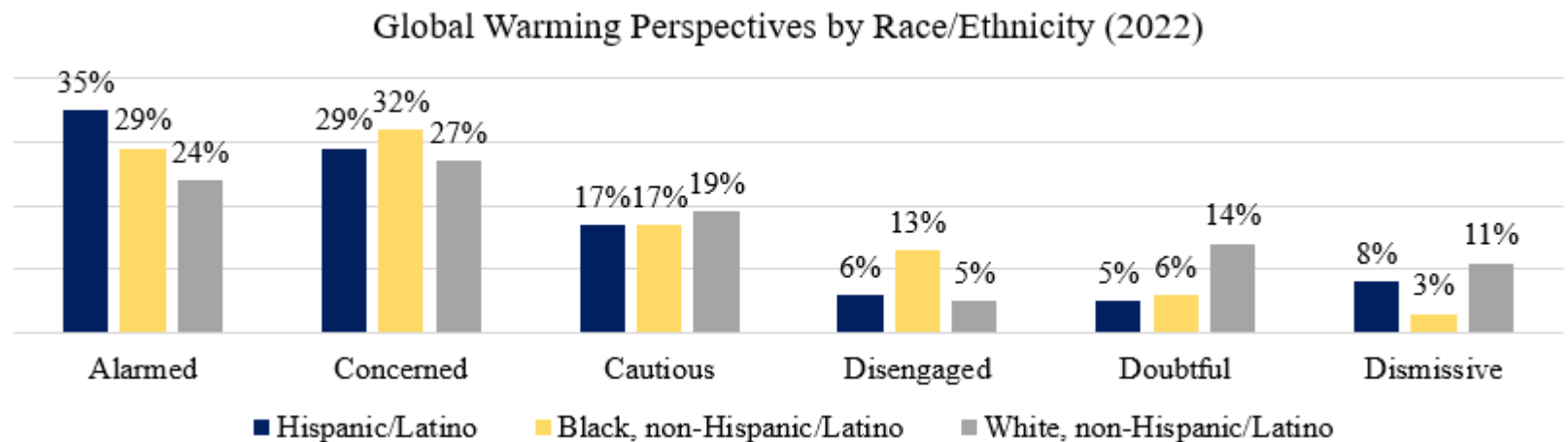
Source: Yale Program on Climate Change Communication

The type of transportation a person takes to work can be a good indicator of health. Walking, biking, or taking public transportation to work promotes regular physical activity and decreases air pollution, which also decrease chronic diseases and obesity rates. A goal of Healthy People 2030 is to increase the amount of people using public transportation to get to work. People who drive to work are less likely to reach the recommended physical activity goal for the day. Driving to work can also have an effect on obesity, diabetes, and heart disease. However, it is not always feasible for someone to walk, bike, or take public transportation to work as many cities lack the proper infrastructure.

The figure below illustrates the modes of transportation taken by the population in the Rural West service area. Carbon County has 80.7% of people who drive alone to work and Schuylkill County has 80.3% of people who drive alone to work. Additionally, Carbon County has 0.3% of people who commute to work via public transportation and Schuylkill County has 0.4% of people who commute to work via public transportation.

Transportation is also a key factor in access to opportunities. The World Bank described transportation as fundamental to supporting economic growth, creating jobs and connecting people to essential services like healthcare or education. Expanding sustainable and climate friendly transport options is vital, especially in low-income or vulnerable communities. Transport expansions can strengthen human development and social inclusion. Of survey respondents in the Rural West service area, 6.9% reported missing or postponing medical care because they did not have a way to get there.

Though a large portion of Schuylkill County residents drive to work, according to ACS 2022, 8.2% of people in Schuylkill County do not have access to a car. This percentage is slightly below the United States (8.33%) and still below Pennsylvania (10.56%). In Carbon County, 4.5% of people do not have access to a car, which is lower than Schuylkill County, Pennsylvania, and the United States. People who do not have access to a car must then rely on public transportation, walking or other modes of transportation. This can be an issue because poor public transportation and lack of walkability in some parts of the county may lead to individuals missing health appointments or screenings, which are crucial to healthy living. In Schuylkill County, residents have access to two public transportation systems, Schuylkill Transportation System (STS) and Berks Area Regional Transportation Authority (BARTA). Both STS and BARTA have fixed bus routes as well as special van services for people with disabilities, people in need of medical assistance, and people 65 years and older. Though BARTA mainly has routes in Berks county, there are many routes with stops in Schuylkill county. There is also a connection point to transfer on to BARTA from STS.

Modes of Transportation to Work 2022 ACS 5 Year Estimates									
Region	Drive Alone	Carpool	Public Transportation	Taxi	Motorcycle	Bike	Walk	Other	Work From Home
Berks County	76.4%	8.0%	1.2%	0.3%	0.1%	0.2%	2.9%	1.8%	9.3%
Bucks County	74.9%	5.8%	2.3%	0.1%	0.1%	0.1%	1.2%	0.7%	14.9%
Carbon County	80.7%	10.1%	0.3%	0.0%	0.0%	0.0%	1.5%	0.6%	6.8%
Lehigh County	75.4%	8.7%	1.6%	0.1%	0.0%	0.1%	2.4%	1.2%	10.5%
Monroe County	73.7%	11.0%	3.5%	0.3%	0.1%	0.0%	1.5%	0.9%	9.0%
Montgomery County	69.4%	6.0%	3.4%	0.1%	0.0%	0.2%	2.1%	0.8%	18.0%
Northampton County	77.4%	6.2%	1.3%	0.1%	0.0%	0.2%	2.2%	1.5%	11.2%
Schuylkill County	80.3%	9.8%	0.4%	0.1%	0.1%	0.1%	3.1%	0.8%	5.3%
Luzerne County	76.6%	10.3%	0.8%	0.1%	0.0%	0.2%	2.5%	1.2%	8.2%
Warren County (NJ)	77.7%	7.0%	1.3%	0.1%	0.0%	0.2%	2.4%	1.3%	9.8%
Hunterdon County (NJ)	72.3%	5.2%	2.1%	0.1%	0.1%	0.1%	1.7%	0.5%	17.9%
Pennslyvania	71.1%	7.7%	4.3%	0.2%	0.1%	0.4%	3.3%	1.0%	11.8%
New Jersey	65.4%	7.6%	9.0%	0.5%	0.0%	0.3%	2.6%	1.5%	13.1%
United States	71.7%	8.5%	3.8%	0.2%	0.1%	0.5%	2.4%	1.1%	11.7%

Residents in Carbon county have access to the Carbon County Community Transit (CCCT) for public transportation. CCCT offers a fixed bus route throughout the county as well as a shared-ride/van service for people with disabilities, people who need medical assistance, and people 65 years and older. Effective March 26, 2020, the Lehigh and Northampton Transportation Authority (LANTA) began administering these transportation services in contract with CCCT. Accessible, affordable, and reliable transportation is essential for everyone, but it is not equally accessible for everyone.

"Public transportation and access to public transportation is still an issue although it has improved over the last couple of years. If you do not have a vehicle or driver's license, you are stuck because this is a rural area. This leads to difficulty to getting to work or being able to make doctor appointments."

·························· Vulnerable Populations ··························

Transportation plays a direct role in providing access to resources. Having reliable transportation influences being able to attend job opportunities, make health care appointments, and have access to parks or places for physical activity.

Transportation inequality significantly impacts low-income individuals and marginalized racial and ethnic groups. These populations often reside in areas with limited access to reliable and affordable transportation, negatively impact access to essential services as mentioned above. As reported in the previous "Housing and Blight" section, Black and Hispanic households deal with the greatest affordability challenges making them more likely to live in inadequate housing. When individuals are already struggling with the cost of living, affording transportation is a need that can go unmet. The American Public Health Association released a updated Transportation Report in 2021 where they found that most people consider reliable transportation as having access to a car. Car ownership can cause a burden to low-income households, as the average annual cost to own a car is $8,449.49.

Percentage of Household in the United States without a Vehicle by Race/Ethnicity

Race/Ethnicity	Percentage
White	6%
People of Color	13%
Pacific Islander	8%
Native American	13%
Mixed Race/other	11%
Latino	10%
Black	18%
Asian American	11%
All	9%
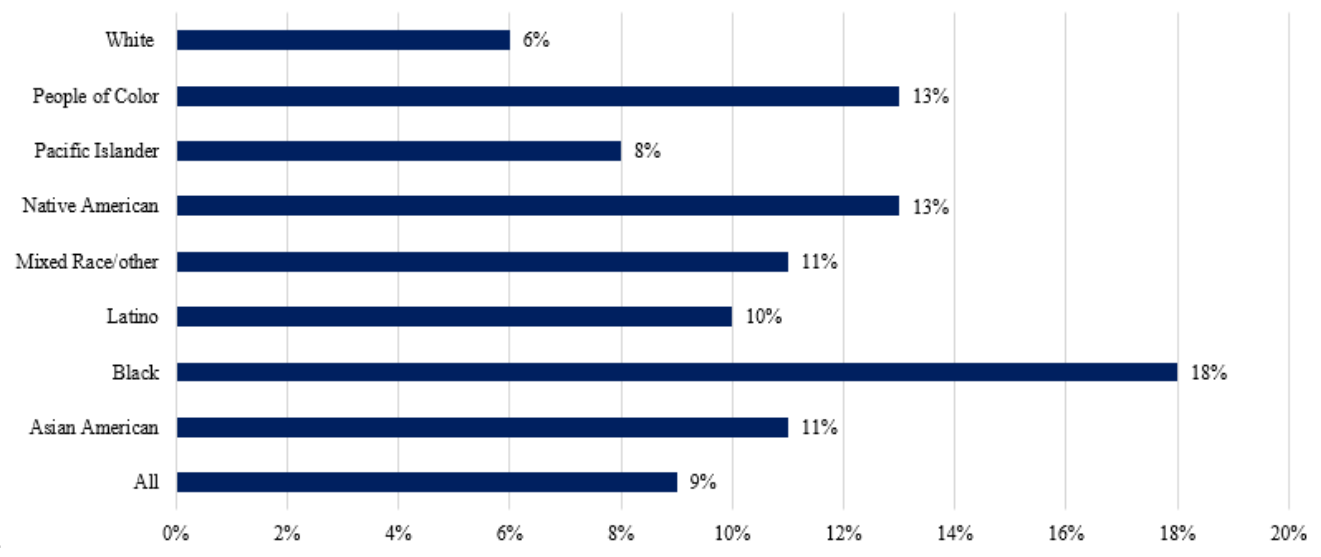
Without a vehicle as a means of transportation, individuals use options like public transit, walking, or biking. Not all individuals live close to public transit or have safe roadways to access those public transit options. Without reliable methods of transportation, employees face being limited to working certain shifts, not being able to attend work on time, or being unable to show up altogether. People who live in auto-centric communities are more likely to fall into poverty due to transportation-related emergencies. A 2021 report by Smart Growth America showed people ages 50 and up, specifically those 75 and older, are overrepresented in deaths involving pedestrians. This age group is more likely to experience challenges seeing, hearing, or moving which presents hazards when walking as a means of transportation.

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Health Behaviors

Health Behaviors are actions taken by individuals that affect their health. These actions can be positive, negative, or have little impact and can include a wide range of choices and activities such as diet, physical activity, smoking alcohol consumption, and adherence to medical advice and care plans. In the United States, health behaviors vary across different regions and populations, reflecting the diversity and complex nature of external influences (e.g., culture, access, financial and social context). Despite local, state, and national efforts in health education and promotion, many people living in the United States continue to engage in unhealthy behaviors (e.g., smoking, substance use, poor dietary habits).

Baseline Only: We don't yet have data beyond the initial baseline data, so we don't know if we've made progress.

Target met or exceeded: We've achieved the target we set at the beginning of the decade.

Improving: We're making progress toward meeting our target.

Little or no detectable change: We haven't made progress or lost ground.

Getting worse: We're farther from meeting our target than we were at the beginning of the decade.

According to Healthy People 2030, the following objectives are related to health behaviors and are measured at the national level. Most Healthy People 2030 objectives are core, or measurable, objectives that are related to targets outlined for the decade (2020-2030). Evidence-based interventions are supported through national, state, and local initiatives. Progress is measured using a variety of data sources (e.g., US Census, ACS estimates, state and county data) and is measured using the following indicators: Baseline only, target met or exceeded, improving, little or no detectable change, getting worse. The objectives outlined have corresponding updates at the national level as of June 2024. Selected objectives are included based on their alignment with SLUHN CHNA survey questions and primary data outcomes.

| Healthy People 2030 objectives for Health Behaviors	Baseline	Target	Most Recent Data	Progress (June 2024)
Increase fruit consumption by people aged 2 years and over	0.51 cups per 1,000 calories (2013-16)	0.56	0.49 (2017-20)	Little or no detectable change
Increase vegetable consumption by people aged 2 years and over	0.76 cups per 1,000 calories (2013-16)	0.84	0.73 (2017-20)	Little or no detectable change
Reduce the proportion of people living with obesity	38.6% (2013-16)	36.0%	41.8% (2017-20)	Getting worse
Reduce the proportion of people aged 21 years and over who engaged in binge drinking in the past month	26.6% (2018)	25.4%	26.0% (2019)	Little or no detectable change
Reduce the proportion adults who used drugs in the last month	12% (2018)	12%	13.4% (2019)	Getting worse
Reduce drug overdose deaths	20.7 per 100,000 (2018)	20.7 per 100,000	32.6 per 100,000 (2022)	Getting worse
Increase the proportion of adults who get enough sleep	72.3% (2020)	73.3%	69.9% (2022)	Getting worse
Reduce the proportion of adults who do no physical activity in their free time	26.1% (2020)	21.8%	26.3% (2022)	Little or no detectable change

Rural West Service Area

Obesity

Obesity is a medical condition characterized by an excess accumulation of body fat that can contribute to poor health and increased risk for developing heart disease, type 2 diabetes, cancer, stroke, and more. Obesity is typically measured by Body Mass Index (BMI), which is a ratio of weight to height (i.e., weight in kilograms divided by the square of height in meters). County Health Rankings assess obesity by measuring the percentage of the adult population (ages 18 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2. A BMI under 18.5 is considered underweight, normal is 18.5-24.9, overweight is 25-29.9, obese is 30 and above. According to County Health Rankings (2024), 33% of adults in Pennsylvania are obese. Carbon County reports that 36% of adults in the county are obese. Similarly, Schuylkill County reports that 39% of adults in the county are obese.

According to the CDC, in 2019 obesity was estimated to cost the U.S. healthcare system $173 billion annually. Obesity-related medical costs are estimated to be $1,861 higher per person than the medical costs of an individual whose BMI falls into the normal weight category. For adults living with severe obesity (BMI greater than 35), the excess costs were $3,097 per person. Many factors play a role in the obesity epidemic and its rapid increase over several decades including: lack of vegetable consumption, lack of physical activity, poor portion control, and poor access to outdoor recreational activities and healthy foods.

Stigma toward people living with obesity is common. This can lead to social and psychological challenges, including bullying, low self-esteem, social isolation, avoidance of healthcare services, decreased physical activity, increased mental health needs, and more. Addressing obesity requires a multifaceted approach that increase health education and promotion and supportive environments that model non-biased behaviors.
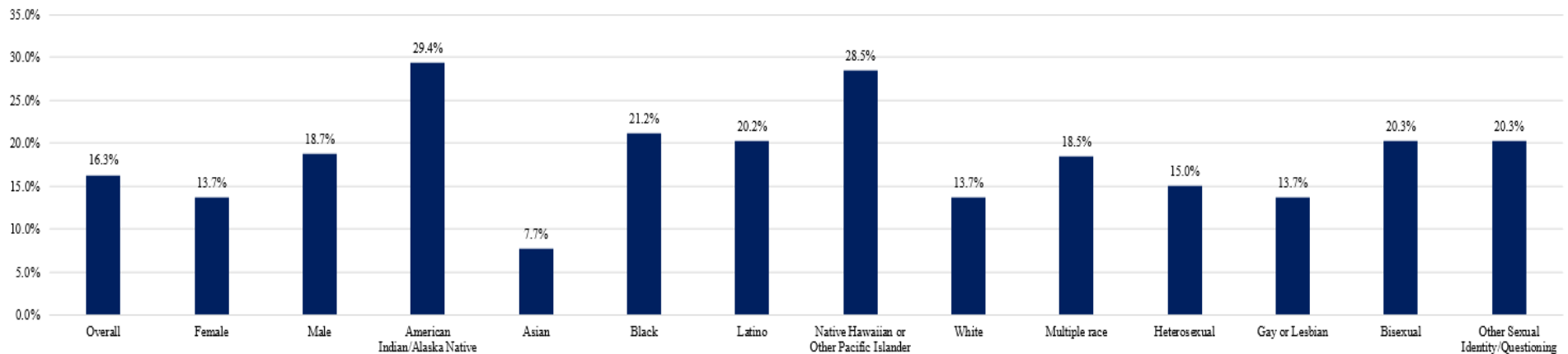
Since 2019, CHNA survey results in the Rural West service area for BMI increased slightly for underweight respondents (1.3%), normal weight respondents (20.0%), and obsese respondents (52.0%) while there was a decrease overweight respondents (26.8%).

BMI Trends, Rural West Service Area

Rural West Service Area
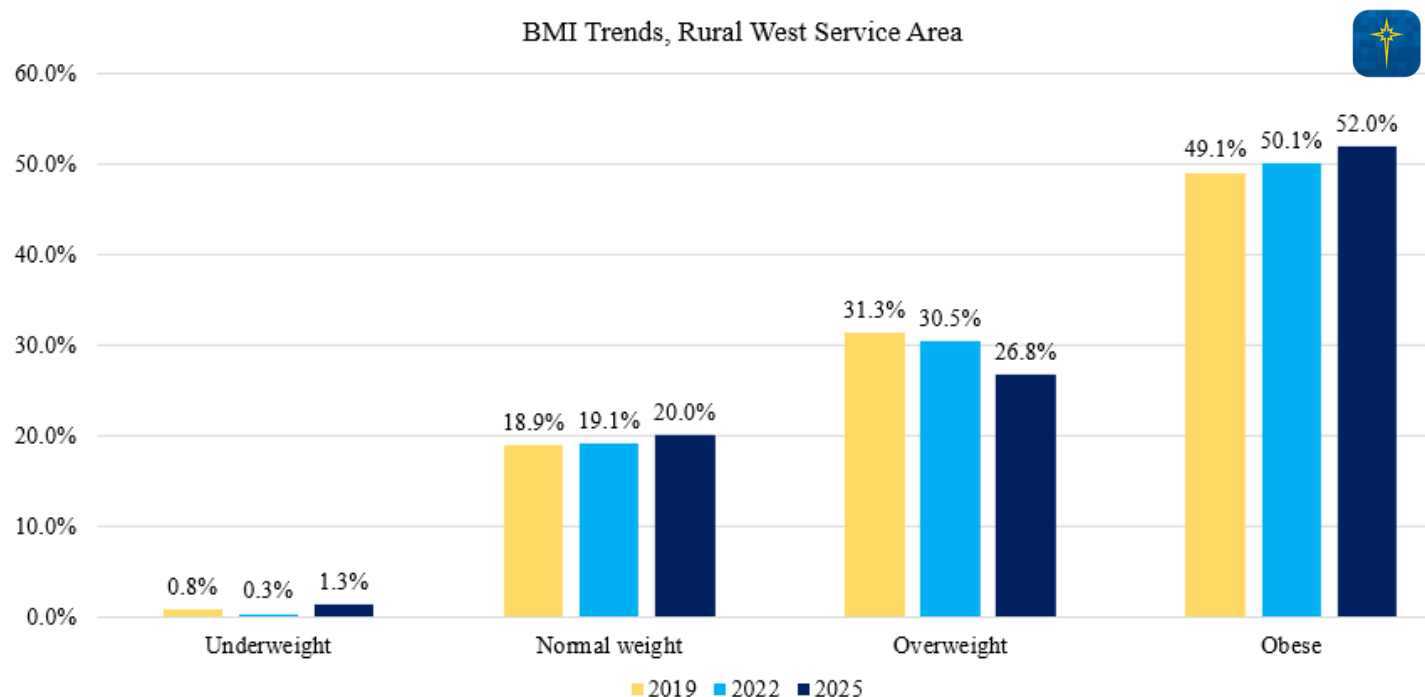
In 2022, Trust for America's Health (TFAH) reported that, as of 2020, "socioeconomic factors such as poverty and discrimination have contributed to higher rates of obesity among certain racial and ethnic populations. Black adults have the highest level of adult obesity nationally at 49.9%; that rate is driven in large part by an adult obesity rate among Black women of 57.9%." The TFAH also reported that Pennsylvania ranks 29 out of 51 states (including Washington, DC) for percentage of adults with obesity and ranks 35 for adults who are overweight. Additionally, 42.8% of Black adults, 32.2% of White adults, and 32.7% of Hispanic/Latino adults in Pennsylvania are obese. The age bracket with the highest percentage of adults with obesity in Pennsylvania is 45-64 years old, accounting for 40.4% of adults with obesity. According to the CDC, 1 in 5 children and adolescents are living with obesity. Childhood obesity is more likely to affect children living in low-income households, Hispanic children, non-Hispanic Black children, and adolescents 10-17 years old. A child is considered obese if their BMI is at or above the 95th percentile. The prevalence of childhood obesity has increased dramatically in recent years, with other comorbidities increasing in children living with diabetes (e.g., diabetes, hypertension). According to the most recent TFAH report (2022) the percent of high school students with obesity in the United States varies based on demographic characteristics and sexual orientation. Overall, 16.3% of high school students were obese, with 29.4% of American Indian/Alaska Native students living with obesity while 7.7% of Asian high school student were living with obesity. Bisexual and other sexual identity/Questioning students were more likely to live with obesity (20.3%) compared to heterosexual (15%) and gay or lesbian students (13.7%). The most recent TFAH (2022) report found that 13.8% of children ages 2-4 and 15.1% of children ages 10-17 in Pennsylvania are obese.

Percent of High School Students with Obesity by Select Demographics (2021)

Demographic	Percent
Overall	16.3%
Female	13.7%
Male	18.7%
American Indian/Alaska Native	29.4%
Asian	7.7%
Black	21.2%
Latino	20.2%
Native Hawaiian or Other Pacific Islander	28.5%
White	13.7%
Multiple race	18.5%
Heterosexual	15.0%
Gay or Lesbian	13.7%
Bisexual	20.3%
Other Sexual Identity/Questioning	20.3%

According to Healthy People 2030, physical activity and exercise contribute to a healthy lifestyle and can help to prevent disease, disability, injury, and premature death. Physical activity includes any movement that expends energy, including daily tasks, recreational activities, and occupational tasks. Exercise refers to planned, structured, and repetitive movements aimed at improving or maintaining physical fitness. Regular physical activity and exercise can enhance cardiovascular health, strengthen muscles and bones, improve mental health, and help individuals maintain a healthy weight. Healthy People 2030 aims to reduce the proportion of adults who "engage in no leisure-time physical activity" and increase the proportion of adults who meet current aerobic physical activity recommendations of exercising five or more days a week for 30 minutes. According to Healthy People 2030, there was 26.1% of adults in the nation that engaged in no physical activity during their free time. The target goal by 2030 is to reduce that to 21.8% of adults in the nation that did not engage in any physical activity in their free time. This aligns with the CDC data that shows fewer than one in four children get enough physical exercise and one in five adults meet physical activity guidelines. The CHR&R measure physical inactivity as the percentage of adults 18 years old and over reporting no leisure-time physical activity. Pennsylvania has 23% of adults who report no leisure-time physical activity. Both Carbon and Schuylkill County have 27% of adults who report no leisure-time physical activity.

There was a slight decrease in survey respondents in the Rural West service area who reported five or more days of physical activity between 2022 (15.4%) and 2025 (14.3%). This could be due to the fact that when the 2022 CHNA survey was administered, it was during the COVID-19 lockdown, and research indicates a spike in physical activity during that time for people who were required to stay home and work remotely. Physical activity for people indicating one to two days (37.5%) increased and zero days decreased (26.1%), while three to four days per week (22.0%) remained similar to previous CHNA data.

Days of Exercise per Week Trends, Rural West Service Area

2019 2022 2025

70

Rural West Service Area
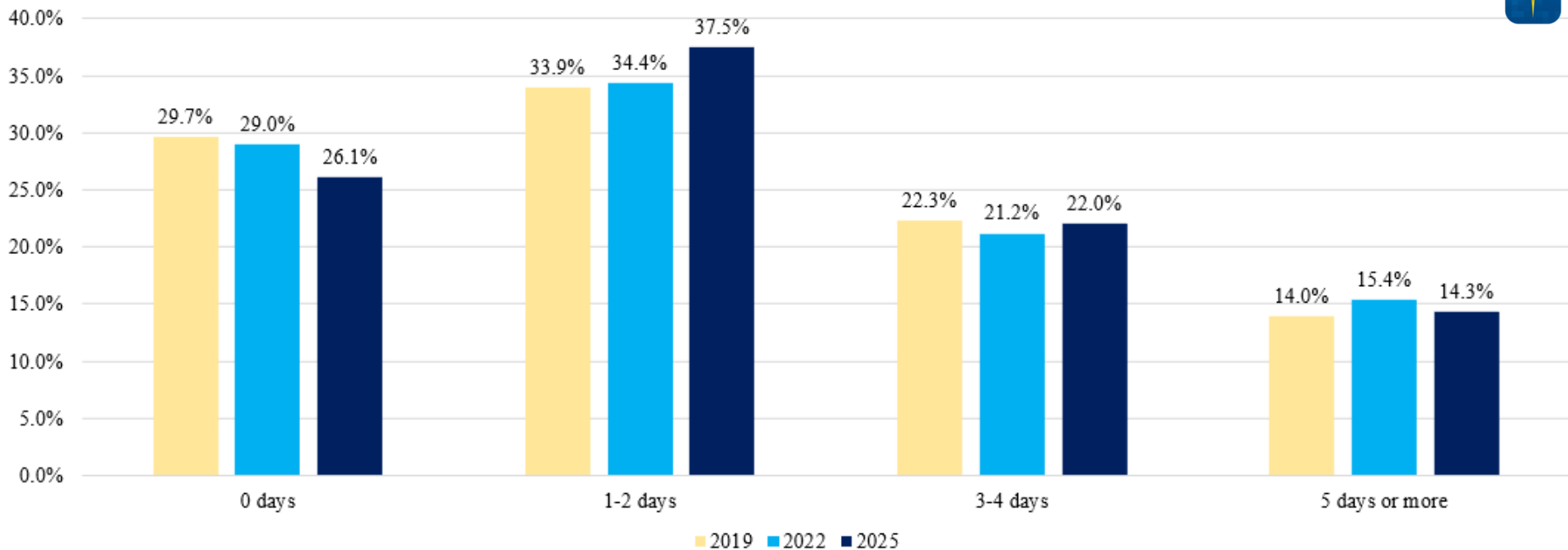
Physical activity levels vary greatly across different populations based on socio-economic, cultural, and environmental factors (e.g., age race. ethnicity, socioeconomic status). Minority populations, including Black and African American, Hispanic, and American Indian or Alaska Native populations are the least likely to engage in leisure-time physical activity, while White and Asian populations are the most likely to engage in leisure-time physical activity. According to Americas Health Rankings Senior Report (2024), 33.1% of older adults in fair or good health in Pennsylvania were physically inactive compared to 30.9% nationwide.

Healthy People 2030 objective to increase the proportion of children who do enough aerobic physical activity has a target goal of 30.4%, meaning that by 2030, 30.4% of children should meet the current aerobic physical guideline of at least 60 minutes of physical activity per day. The most recent data (2021) reports that only 23.6% of children meet that goal, and the trend is decreasing. When broken down by race, American Indian and Alaska Native children were the most likely to meet the goal (35%) and Asian children were the least likely (17.2%).

Children Meeting Aerobic Physical Activity Guidelines by Race/Ethnicity (2020-21)
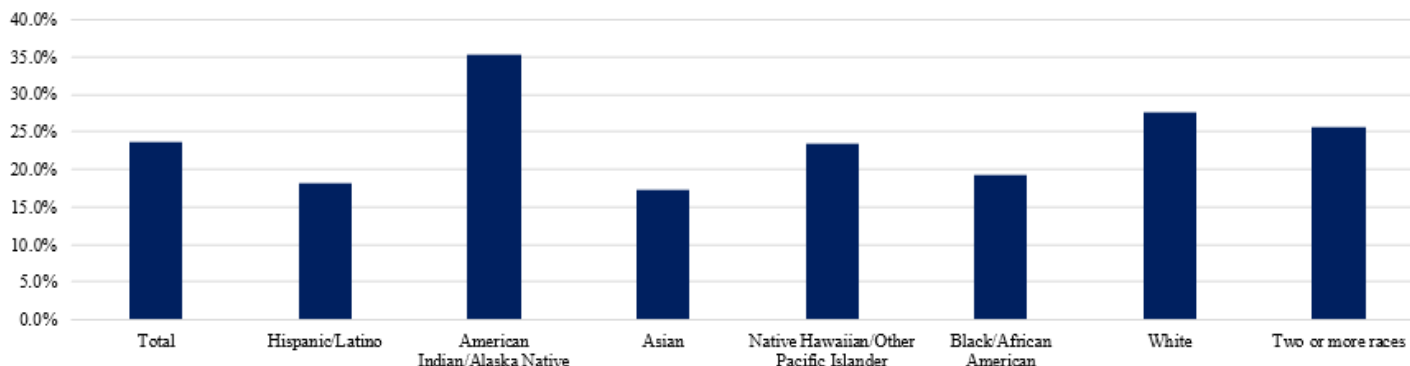
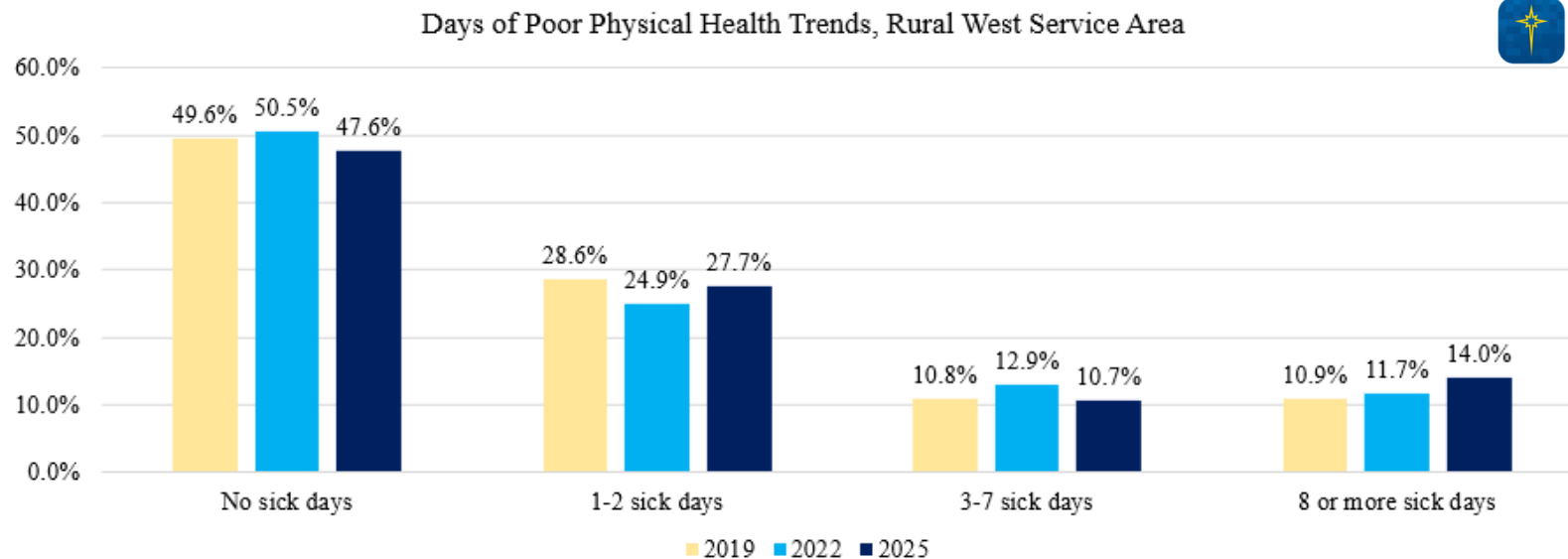Source: National Survey of Children's Health, 2021

Adults Engaging in no Leisure-time Physical Activity by Race/Ethnicity (2022)
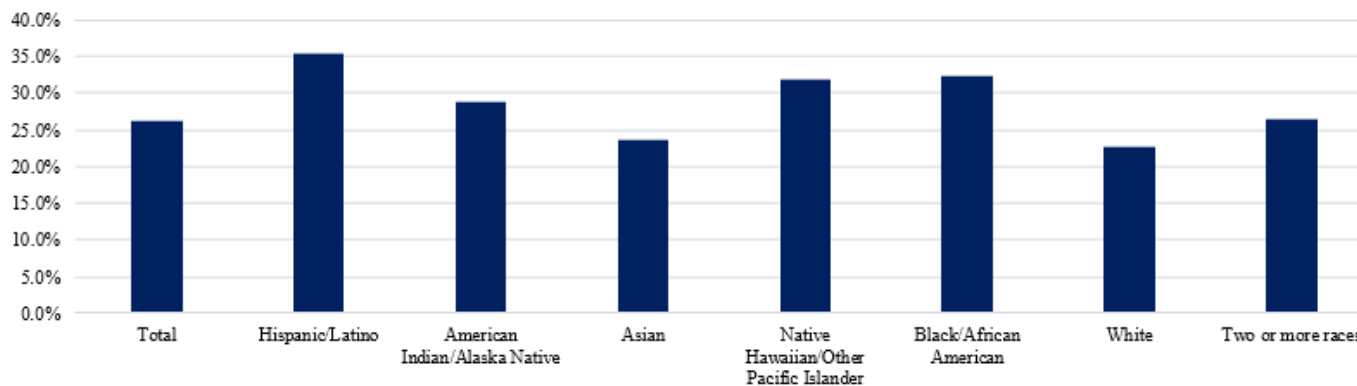
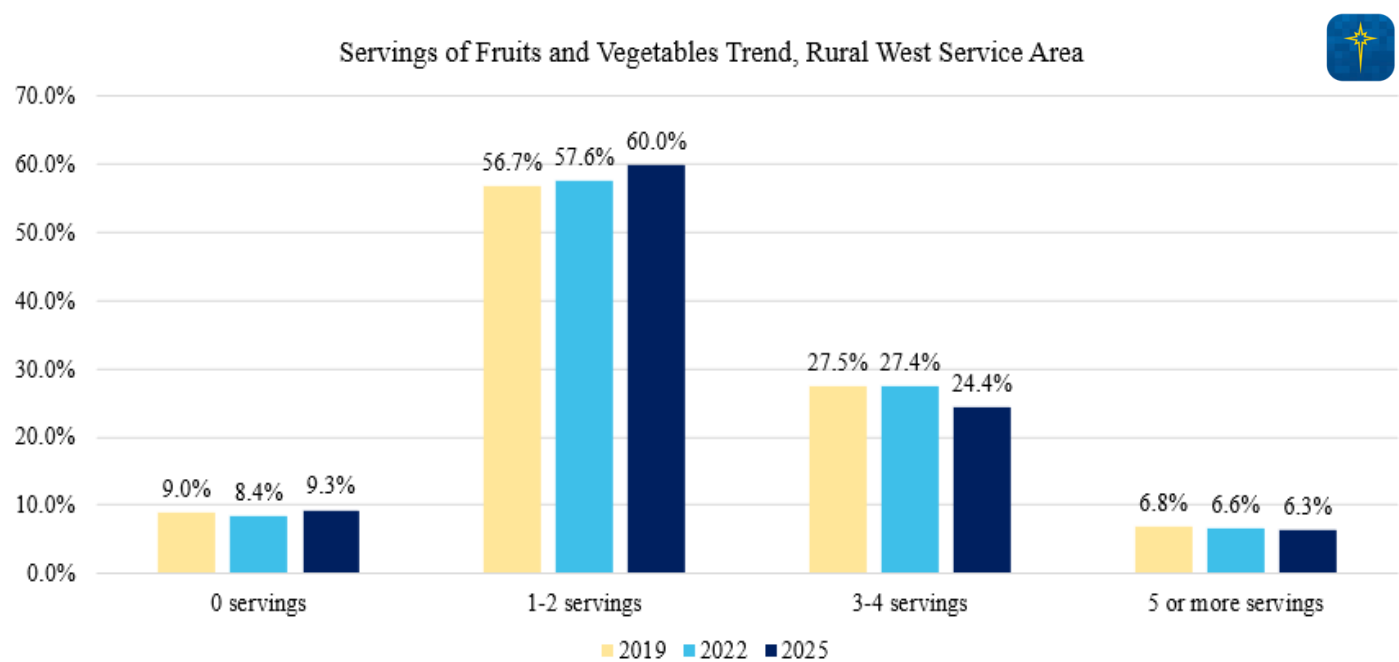Source: National Interview Health Survey, 2022

Rural West Service Area

According to Healthy People 2030, daily physical activity can prevent disease, disability, injury, and premature death. CHR&R assesses the number of poor physical health days people experience since it can be a predictor for negative outcomes associated with health such as unemployment, poverty, and mortality. The poor physical health days question is measured by the average number of physical unhealthy days in the past 30 days. In Pennsylvania, the average is 3.4 unhealthy days. Carbon County averages 3.9 physically unhealthy days, the highest of SLUHN service area, and Schuylkill County averages 3.8 unhealthy days. Of the CHNA respondents in the Rural West service area, 47.6% indicated no sick physically unhealthy days in the past 30 days, 27.7% indicated 1-2 sick days, 10.7% indicated 3-7 sick days, and 14.0% indicated eight or more sick days in the past 30 days. Since the 2022 CHNA survey, there was a decrease in respondents with no sick days, and an increase in respondents with 1-2 sick days and 8 or more sick days.

Days of Poor Physical Health Trends, Rural West Service Area

	No sick days	1-2 sick days	3-7 sick days	8 or more sick days
2019	49.6%	28.6%	10.8%	10.9%
2022	50.5%	24.9%	12.9%	11.7%
2025	47.6%	27.7%	10.7%	14.0%

Diet

Diet (e.g., fruit and vegetable consumption) plays a large role in overall health and reducing chronic disease. The CDC states that eating a diet filled with a variety of fruits and vegetables can reduce the risk of type 2 diabetes, certain cancers, and cardiovascular disease, all of which play a role in the top leading causes of death nationally. Released in February 2021, the CDC surveyed adults 20 years and older and found that the majority of adults consumed a serving of fruit (67.3%) or vegetable (95%) on a given day, with more women reporting eating a serving of a fruit and vegetable on a given day than men. Compared to CHNA survey results, 90.6% of survey respondents in the Rural West service area reported eating at least one serving or fruit or vegetables per day. Additionally, America's Health Rankings surveyed adults across the country asking respondents to indicate consuming two or more servings of fruit and three or more servings of vegetables daily (five servings total). In Pennsylvania, 7.8% of adults consume two or more servings of fruit and three or more servings of vegetables daily along with 7.4% of adults nationwide.

In the Rural West service area, 6.3% of respondents eat the recommended five or more servings of fruits and vegetables a day, a slight decrease from 2022. The majority of respondents eat 1-2 servings a day (60.0%), an increase from 2022. Furthermore, looking at fruits and vegetable consumption by income shows that serving size increases with income. Of respondents who make less than $14,999, 21.0% do not consume any fruits or vegetables and only 5.0% consume the recommended amount of five or more fruits and vegetables a day. For individuals making more than $60,000 per year, 6.5% reported no fruits or vegetables, and 6.0% reported consuming five or more servings per day. The majority of respondents in each income bracket consume 1-2 servings of fruits and vegetables a day.

Servings of Fruits and Vegetables Trend, Rural West Service Area

Servings	2019	2022	2025
0 servings	9.0%	8.4%	9.3%
1-2 servings	56.7%	57.6%	60.0%
3-4 servings	27.5%	27.4%	24.4%
5 or more servings	6.8%	6.6%	6.3%

Vulnerable Populations

Healthy People 2030 set two general goals, as well as numerous targeted goals (e.g., reduce iron deficiency in children aged one to two years old) related to nutrition and healthy eating. The two general goals, increase fruit consumption by people aged two and over and increase vegetable consumption by people aged two and over, are used to help understand general eating patterns and behaviors for the population. The goal for fruit consumption is 0.56 cup equivalents per 1,000 calories and vegetables is 0.84 cup equivalents per 1,000 calories. As of 2020, data shows that only 0.49 cup equivalents of fruit per 1,000 calories and 0.73 cup equivalents of total vegetables per 1,000 calories were being consumed, indicating little or no detectable change. According to America's Health Rankings Senior Report, 6.9% of older adults in Pennsylvania have adequate fruit and vegetable consumption, compared to 7.3% nationwide.

Sexual Activity

Healthy People 2030 reports that there are more than 20 million new cases of preventable sexually transmitted infections (STI) in the United States each year. Healthy People 2030 objectives are to increase knowledge and education of sexual education across adolescents and adults and decrease the rate of STIs and sexually transmitted diseases (STDs). Adolescents may experience developmental changes that affect physical and mental health, potentially increasing risky behaviors. Risky behaviors increase the chances of STIs and teen pregnancy. Healthy People 2030 objectives for teen pregnancy are to reduce pregnancies in adolescents, increase the percentage of adolescents using effective birth control, and to increase the proportion of adolescents who receive formal sexual education before age 18.

The Robert Wood Johnson Foundation's County Health Rankings assess two sexual activity measures: STI and teen births. The 2024 rankings use STI data that reflects the number of new chlamydia cases per 100,000 population. These rates are important to assess because chlamydia is the "most common bacterial sexually transmitted infection (STI) in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain." Chlamydia also disproportionately impacts adolescent women, with 1 in 20 sexually active women ages 14-24 years old have chlamydia. In Pennsylvania, the rate is 409.8 per 100,000 population. Schuylkill County has a rate of 264.5 per 100,000 and Carbon County has a rate of 192.6, the lowest in the SLUHN service area.

There are also strong connections between teen birth and poor socioeconomic and/or mental outcomes. County Health Rankings and Roadmaps (CHR&R) also found that teenage mothers who give birth are less likely to achieve an education level beyond high school and are more likely to experience psychological distress. The measure is represented by the number of births per 1,000 female population ages 15-19 years. In Pennsylvania, the rate is 13 per 1,000 population. Carbon County has a birthrate of 15 per 1,000 population and Schuylkill County has a birthrate of 19 per female population ages 15-19. In addition to the impact of teen pregnancy on mothers, the prevalence of low birthweight in teen pregnancy is significant. Low birthweight is when a baby is born weighing less than 5 pounds, 8 ounces. Approximately 8% of babies in the United States are born with low birthweight. A low birthweight baby may have significant complications, including birth defects, infections, trouble eating, and trouble gaining weight. Teen mothers (and mothers over 40) are most likely to have a low birthweight child. Carbon County has a low birthweight rate of 8% while Schuylkill County has a low birthweight rate of 9%, the highest of SLUHN service area.

Sleep

The CHR&R indicated that sleep is an important part of a healthy lifestyle and a lack of sleep can have serious and negative health effects. Healthy People 2030 also reports that approximately one in three adults do not get enough sleep. Ongoing sleep deficiency has been linked to numerous health conditions such as heart disease, stroke, depression, and anxiety. Objectives for Healthy People 2030 include the reduction of motor vehicle crashes due to drowsy driving, to increase the proportion of children who get sufficient sleep, and to increase the proportion of adults who get sufficient sleep. In Pennsylvania, 37% of adults report less than an average of 7 hours of sleep per night. There were 35% of adults reporting less than an average of seven hours of sleep in Carbon County and 36% of adults report less than an average of seven hours of sleep in Schuylkill County.

The 2023 PAYS survey asked students to indicate amount of sleep per night, with 35.7% of students in Pennsylvania reporting an average of less than seven hours. Carbon County reported 39.3% and Schuylkill County reported 34.5%. The survey also asked if students "felt tired or sleepy during the day," "every day," or "several times" during the past two weeks. Across Pennsylvania, 64.4% of students indicated consistent sleepiness during the past two weeks. Carbon County reported 62.7% and Schuylkill County reported 60.3%. The CDC recommends seven or more hours of sleep for those aged 18-60 years old, 7-9 hours for those aged 61-64 years old, and 7-8 hours for those 65 years of age and older.

To get an understanding of how many hours of sleep respondents get, the CHNA survey asked respondents to indicate, on average, the number of hours they sleep in a 24-hour period. The majority of respondents in the Rural West service area (76.0%) get between 6-8 hours of sleep a night, 4.5% of respondents get 9 or more hours, and 19.6% of respondents get five hours or less.

Hours of Sleep, Rural West Service Area

- 5 or less hours
- 6-8 hours
- 9 or more hours
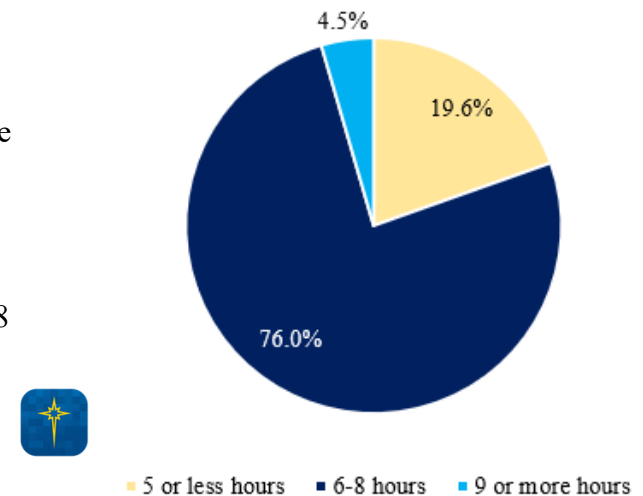
Mental Health

Mental health has been an increasing issue during the last ten years, even prior to COVID-19. Mental health disorders can affect people of all age and racial groups, but some populations have disproportionately higher rates of diagnosis. Mental health disorders like anxiety and depression can affect a person's ability to take part in healthy behaviors and result in physical health problems making it harder for them to get treatment for mental disorders. Goals related to mental health for Healthy People 2030 are to increase the proportion of people who get treatment for substance use and mental health disorders, increase the proportion of children and adolescents with symptoms of trauma who get treatment, increase quality of life for cancer survivors, reduce the suicide rate, and increase the proportion of public schools with a counselor, social worker, and psychologist. To help reach, educate, and connect people with mental health disorders to care, there is a local National Alliance on Mental Illness (NAMI) or related chapter in each service area. In Schuylkill county, there is the NAMI Schuylkill County. For Carbon, there is the Carbon-Monroe-Pike Mental Health and Developmental Services.

According to the State of Mental Health in America 2024 Report, 23% of adults (60 million people) experienced a mental illness in the past year, compared to 19.86% of adults in 2022. One in four adults with frequent mental distress could not see a doctor due to cost, a 2% increase since 2022 and 5% of adults reported experiencing thoughts of suicide.

"We need more awareness of mental health. What are some of the signs and how can we prevent incidents? Where can these individuals go to get help?"

The report ranks states on their prevalence rates and access to mental health care for adults and youth. States ranked 1-13 have lower prevalence and higher access to care, while 40-51 (including The District of Columbia) have higher prevalence rates and lower access to care. For overall adult rankings, Pennsylvania ranks 10th. Contrarily, states that are ranked 39-51 indicate a higher prevalence of mental illness and lower rates of access to care. The 2024 report indicated that Americans report experiencing any mental illness (AMI) which is characterized as having a diagnosable mental, behavioral, or emotional disorder other than a developmental or substance use disorder. Pennsylvania ranks 18th with a 19.70% prevalence rate. The Access to Care ranking indicates how much access to mental healthcare exists within a state (e.g., access to insurance, access to treatment, quality and cost of insurance, access to special education, mental health workforce availability). A lower number for access ranking indicates that a state provides relatively more access to mental healthcare than those ranked 39-51. Pennsylvania is ranked 10th.

State of Mental Health in America (2022), State Adult Rankings	PA%	PA Rank	United States
Adults with any Mental Illness (AMI)	19.7%	17	19.9%
Adults with Substance Use Disorder in the past year	7.3%	15	7.7%
Adults with serious thoughts of suicide	4.8%	28	4.6%
Adults with AMI who are uninsured	5.9%	10	11.1%
Adults with AMI who do not receive treatment	51.9%	17	55.9%
Adults with AMI reporting an unmet need	25.7%	31	24.7%
Adults with cognitive disability who could not see a doctor due to costs	23.8%	13	29.7%

·················· **Depression and Anxiety** ··················

Depression is a significant issue facing the U.S. and the residents of our service area. The National Institute of Mental Health (NIMH) define depression as a mood disorder that causes "severe symptoms [that] affect how you feel, think, and handle daily activities, such as sleeping, eating, or working. To be diagnosed with depression, the symptoms must be present for at least two weeks." Some signs of depression are, but not limited to: persistent sad mood; feelings of hopelessness or pessimism; decreased energy or fatigue; difficulty concentrating, remembering, or making decisions; and thoughts of death or suicide. Depression can happen at any age but is more common in adulthood.

In midlife or older adults, depression can co-occur with other serious medical illnesses like diabetes, cancer, heart disease, and Parkinson's disease. Some risk factors include personal or family history of depression, major life changes, trauma, or stress, and certain physical illnesses and medications. Depression can be treated with medications, psychotherapy (counseling), or a combination of both.

In Pennsylvania, the state asked about depression on their 2022 Behavioral Health Risk Factor Surveillance System (BRFSS), which included depression, major depression, and minor depression (dysthymia). The survey found that 21.7% of people in Pennsylvania were depressed. The survey broke the counties into clusters, finding that 24.6% of Carbon County and 26.4% of Schuylkill County reported a depression diagnosis.

Anxiety is another common mental health concern that affects people across the country. Anxiety is a normal part of life, but for a disorder, it is more than temporary worry or fear. The NIMH says "for a person with an anxiety disorder, the anxiety does not go away and can get worse over time. The symptoms can interfere with daily activities such as job performance, schoolwork, and relationships." Risk factors for anxiety disorders differ for each disorder, but generally include temperamental traits of shyness or behavioral inhibition in childhood, exposure to a stressful or negative life or environmental events in early childhood or adulthood, a history of anxiety in relatives, and some health conditions. Anxiety disorders can be treated with psychotherapy, medication, or a combination.

Generalized Anxiety Disorder (GAD) displays excessive anxiety or worry, most days for at least 6 months, about a number of things, causing significant problems in areas of life like social interactions, school, and work. In 2022, the Anxiety and Depression Association of America (ADAA) found that GAD affects 3.1% of the U.S. population, however only 43.2% of those affected are receiving treatment.

···················· Suicide ····················

Suicide is a serious public health crisis in the United States and affects individuals of all ages, genders, cultures, races, and backgrounds. While some populations are statistically at higher risk than others (e.g., LGBT+, veterans, adolescents), there are many factors that contribute or are correlated with suicide, including mental health disorders (e.g., depression, anxiety), substance use, traumatic experiences, and socio-economic stressors.

| Suicidal Ideation, Mental Health America (2024)	
County	Per 100,000
Berks	14.26
Bucks	12.34
Carbon	22.82
Lehigh	9.74
Luzerne	13.61
Monroe	13.67
Montgomery	13.32
Northampton	11.1
Schuylkill	11.48
Hunterdon	9.84
Warren	12.97
Pennsylvania	17.5
New Jersey	16.7
United States	19.4

Suicide involves dynamic interactions between national and community issues, families and relationships, and individual health and/or well-being. According to the CDC (2022), there is one suicide death every eleven minutes in the United States. It has become a growing concern and is now the second leading cause of death for individuals 10-34 years old and fourth for 35-54 years old. A CDC Suicide Mortality report in the United States from 1999-2021 was released April 2023, outlining the suicide rate during a 10-year period. The age-adjusted rate in 2021 was 14.1 per 100,000 people, which is slightly lower than the rate in 2020 (13.5). The 2021 crude rate is 24.5 per 100,000 people. In 2021, the National Hospital Ambulatory Medical Care Survey (NHAMCS) reported 660,000 emergency visits for self-harm. Mental Health America data (2023) indicates that Carbon County has 22.82 individuals reporting suicidal ideation per 100,000 and Schuylkill County has 11.48 individuals per 100,000 reporting suicidal ideation.

In response to the growing suicide rates, Pennsylvania has made state suicide prevention plans. Pennsylvania's prevention plan was released in September 2020, outlining 8 specific prevention goals, including increased suicide prevention awareness efforts that reduce stigma and promote safety, help-seeking, and wellness; promote trauma-informed approaches to support all Pennsylvania residents as part of upstream, universal suicide prevention efforts; and provide quality training on the prevention of suicide and management of suicide risk across multiple sectors and settings. Some populations are more vulnerable than others to mental disorders, substance use, and suicide. A SAMHSA study published in June 2020 found that Hispanic populations are more likely to lack high-quality evidence-based cultural grounded treatment options and have disparities in treatment outcomes. Additionally, 1 in 20 Hispanic people do not receive services from a mental health specialist due to stigma, discrimination and lack of knowledge about services. This is a population that should be targeted by providing culturally appropriate counseling and specialized advertising to encourage care-seeking behaviors.

Vulnerable Populations

Another population particularly vulnerable to suicide is Veterans. A 2023 National Veteran Suicide Prevention Report by the U.S. Veterans Affairs found that in 2021, 6,923 veterans died by suicide, an increase of 114 from 2020. When looking at age-adjusted and sex-adjusted suicide rates, veterans suicide rates increased 11.6% between 2020 and 2021, compared to 4.5% for the general population. In 2021, suicide was the 13th leading cause of death for veterans overall, and the second leading cause of death for Veterans under 45 years old. The unadjusted suicide rate was 19.7 per 100,000 for Veterans with Hispanic ethnicity, compared to 33.4 per 100,000 for other Veterans. Suicide rates in veterans tend to be affected by economic disparities, homelessness, unemployment, disability status, community connection, and personal health and well-being. Veterans served by the Veterans Health Administration (VHA) who die by suicide are more likely to have sleep disorders, traumatic brain injuries, or a mental health disorder diagnosis. These suicide rates tend to be higher in individuals who live in rural areas and individuals who are isolated.
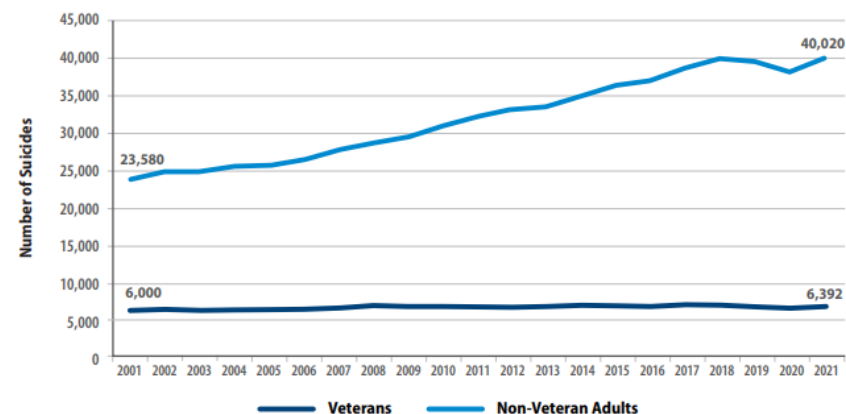
The 2024 State of Mental Health in America Report also ranked states by youth measures, with 20% of youth ages 12-17 reporting they suffered from at least one major depressive episode in the past year, up from 15.08% in 2022. A major depressive episode is "a period of two weeks or longer in which a person experiences certain symptoms of major depression: feelings of sadness and hopelessness, fatigue, weight gain or weight loss, changes in sleeping habits, loss of interest in activities, or thoughts of suicide." Additionally, 53.7% of youth in Pennsylvania dealt with a major depressive episode in the last year with an unmet need for treatment compared to 48.3% nationwide. Of youth nationwide not receiving care, 86.9% reported that they should have been able to handle their mental healthcare on their own. For overall youth ranking, Pennsylvania ranks 13th.

State of Mental Health in America 2022 State Youth Rankings	PA%	PA Rank	US
Youth with at least one Major Depressive Episode (MDE) in the past year	12.88%	4	15.08%
Youth with Substance Use Disorder in the past year	3.52%	7	4.08%
Youth with severe MDE	8.2%	5	10.6%
Youth with MDE who did not receive mental health services	51.9%	17	55.9%
Youth with severe MDE who recived some consistent treatment	39.9%	7	27.2%

Released in September 2020, the National Vital Statistics Report and CDC published a report of suicides among adolescent and youth ages 10-24 years old between 2000-2018. The average percent increase in suicide deaths among 10-24 years old from 2007-2009 to 2016-2018 went from 47.1% to 53.6% in Pennsylvania. According to researchers at the US National Institutes of Health, suicide rates among 8-12 year olds rose by an average of 8.2% annually from 2008 to 2022, and were disproportionately increasing among girls, making it the 5th leading cause of death in girls aged 8-12 years old. From 2020 to 2021, suicide rates increased significantly for both Black females and White females. Suicide rates also increased significantly for non-Hispanic American Indian or Alaska Native, Black, and White males.

Children are becoming more vulnerable to mental health disorders (e.g., depression), suicidal ideation, and suicide, with 14.8% of students in Pennsylvania indicated using self-harm (e.g., cutting, scraping, burning) in the past 12 months. 16.5% of students in Carbon County and 15.2% of students in Schuylkill County indicated using self-harm. Across the state, 16.1% of students indicated seriously considering suicide, 12.5% planned suicide, 5.2% attempted suicide, and 29.7% needed medical treatment as a result of an attempted suicide. The figure below shows the 2023 PAYS survey responses related to suicide and suicidal ideation in the Rural West service area.

In the 2023 PAYS survey children were asked about prolonged sadness and depression. The most common depressed thought of all children in Pennsylvania (38.6%) was *at times I think I am no good at all*. Additionally, 37.3% of children in Pennsylvania reported feeling sad or depressed most days in the past 12 months, a decrease from 40.1% in 2021. The 2023 PAYS also illustrated some concerning trends in regard to perceived importance of school with only 42.9% of all students across the state feeling that school is going to be important for their future, 36.0% of students report enjoyment in school, a reduction from 37.6% in 2021. Additionally, 78.4% of students feel safe at school, a 3.6 percentage point fall from 82.0% in 2021.

Many risk and protective factors come into play when understanding observed rates of substance use and mental health issues addressed in this assessment. A risk factor is something that poses potential harm to a student's life and a protective factor is something that can help keep the student safe. Among the highest risk factors across the state were low commitment toward school (57%) of students at risk), academic failure (37% at risk), and parental attitudes encouraging antisocial behavior (55% at risk). Among the highest protective factors were family attachment (68% of students with protection), family opportunities for prosocial involvement (64% with protection), and family rewards for prosocial involvement (52% with protection).
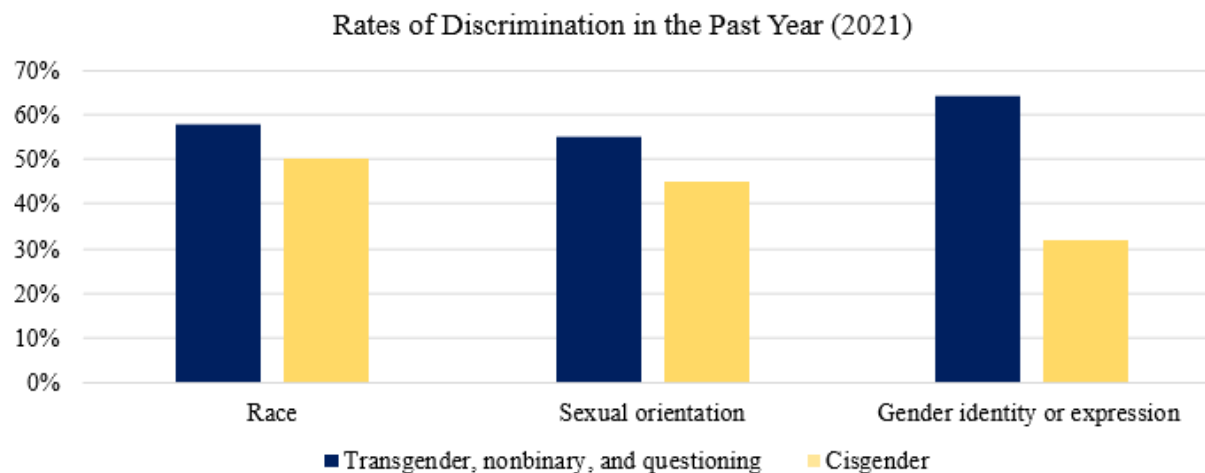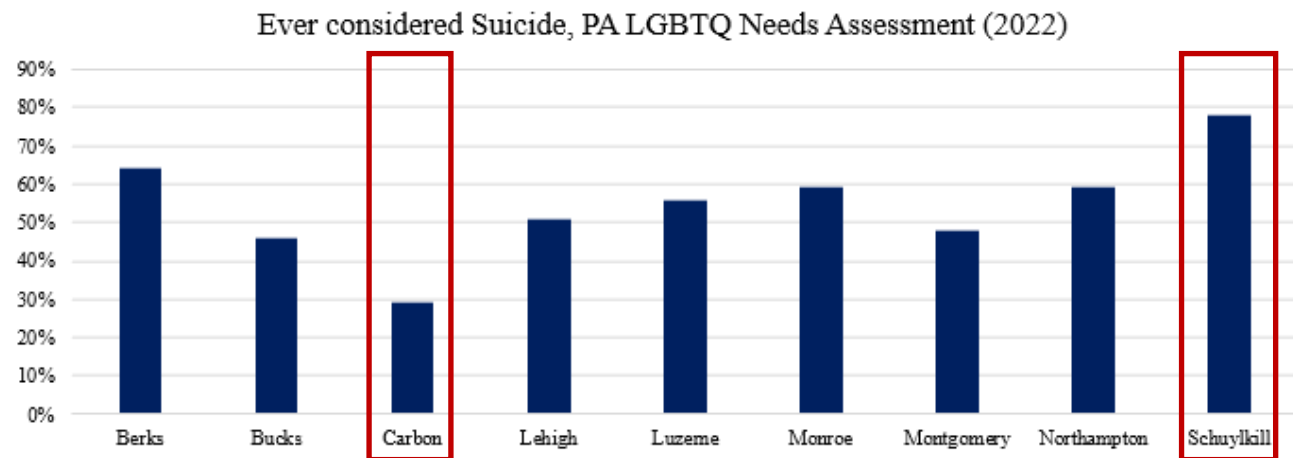
In 2023, the National Vital Statistics Report and CDC released a 2022 provisional estimate of suicide by demographic characteristics in the United States. Provisional data provides an early estimate of deaths before the release of final data. The number of suicides for males increased 2% from 38,358 in 2021 to 39,255 in 2022. The number of suicide for females increased 4% from 9,825 to 10,194. Of the races presented in the report (Hispanic, Non-Hispanic American Indian and Alaska Native, Asian, Black, and White) the highest rate was American Indian and Alaska Native people at 26.7 deaths per 100,000 standard population. All of the female groups increased in suicide rates from 2021-2022, with a significant increase for only White females (0.2% increase from 7.1 to 7.3).

2023 PAYS Survey, Suicide and Suicidal Ideation					
County	Indicated using self-harm (scraping, burning, cutting)	Seriously considered suicide	Planned suicide	Attempted suicide	Needed medical treatment from suicide attempt (out of students reporting suicide attempt)
Berks	15.5%	16.2%	12.5%	5.6%	33.1%
Bucks	13.0%	13.8%	10.9%	4.4%	29.3%
Carbon	16.5%	18.6%	14.6%	6.6%	30.3%
Lehigh	13.9%	15.1%	14.6%	5.5%	30.6%
Luzerne	15.6%	16.9%	13.4%	6.7%	26.7%
Monroe	15.7%	17.8%	14.4%	6.4%	29.5%
Montgomery	13.2%	13.7%	10.3%	4.1%	28.5%
Northampton	17.3%	18.1%	14.9%	6.8%	29.1%
Schuylkill	15.2%	16.4%	13.4%	5.4%	30.0%
Pennsylvania	14.8%	16.1%	12.5%	5.2%	29.7%

There are clear disparities statewide between and within the LGBT+ community. The Pennsylvania LGBTQ Health Needs Assessment (2022), conducted by Bradbury-Sullivan Community Center based in Allentown, Pennsylvania, reported that 21.0% of respondents had experienced homelessness at some point in their lifetime. Mental health disorders also pose an immense public health crisis. Respondents indicated that depression was the highest community health priority issue (57.3%), followed by loneliness and isolation (37.4%) and suicide (35.5%). Almost half of respondents (48.0%) reported thoughts of harming themselves at some point in their lifetime, and of those who had thought about harming themselves, 83.3% had thoughts of self-harm as youth (i.e., 19 years old and younger).
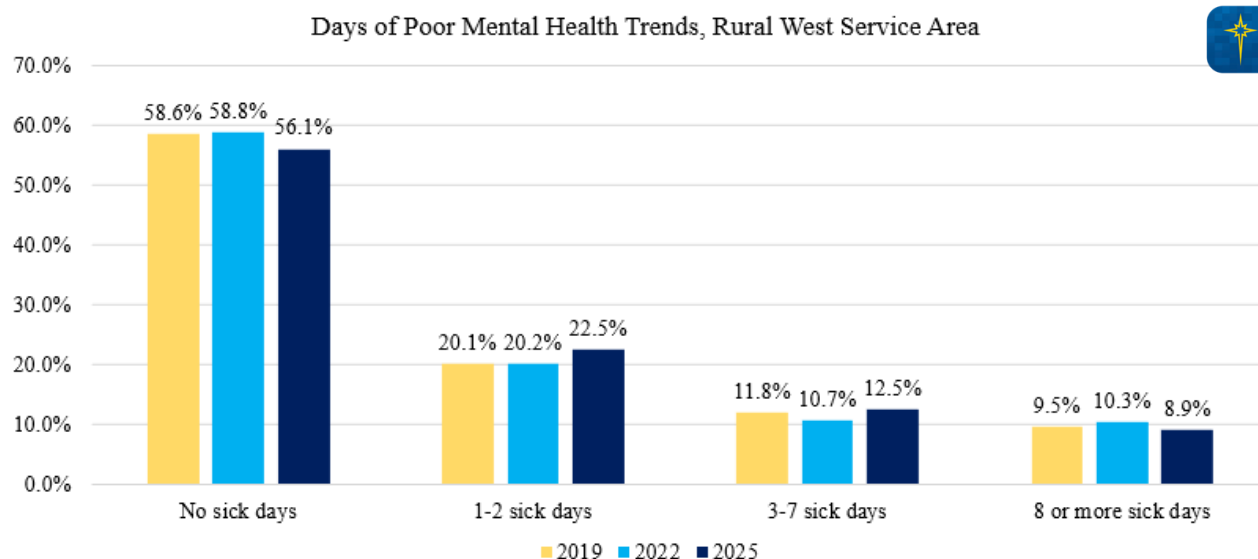
The Trevor Project's 2021 National Survey of LGBT+ Youth Mental Health revealed that 19.0% of LGBT+ youth aged 13–18 and 8.3% of those aged 19–24 reported attempting suicide in the past year. When these rates are applied to the estimated number of LGBT+ youth in the U.S., it translates to approximately 503,073 youth aged 13–18 and 209,917 youth aged 19–24, totaling 712,990 LGBT+ youth aged 13–24 who attempted suicide in the past year.

Additionally, over one in five (21%) Black transgender, nonbinary, or questioning young people reported attempting suicide in the past year. This rate is more than double that of Black cisgender LGBT+ young people (8%). More than one-third (32%) of Black cisgender LGBT+ young people seriously considered suicide in the past year, compared to just over half (51%) of Black transgender, nonbinary, or questioning young people.

Ever considered Suicide, PA LGBTQ Needs Assessment (2022)

Rates of Discrimination in the Past Year (2021)

■ Transgender, nonbinary, and questioning   ■ Cisgender

Poor mental health days is important to assess because it can be a good indicator for overall well-being. The CHR&R assess poor mental health days by the average number of mentally unhealthy days in the past 30 days. In Pennsylvania, the overall average is 4.7 unhealthy days. Carbon County has the highest average number of mentally unhealthy days in the SLUHN service area (5.5) and Schuylkill County has an number of 4.9 mentally unhealthy days. The majority of CHNA respondents in the Rural West service area indicated no mentally unhealthy days in the past 30 days (56.1%), which was a decrease from 2022. There was an increase in respondents that indicated 1-2 sick days (22.5%), 3-7 sick days (12.5%), and a decrease in respondents with 8 or more sick days (8.9%) in the past 30 days.

Days of Poor Mental Health Trends, Rural West Service Area

Category	2019	2022	2025
No sick days	58.6%	58.8%	56.1%
1-2 sick days	20.1%	20.2%	22.5%
3-7 sick days	11.8%	10.7%	12.5%
8 or more sick days	9.5%	10.3%	8.9%

Substance Use

According to Healthy People 2030, Over 20 million adults and adolescents in the United States experienced a substance use disorder (SUD) in 2023. SUD can involve illicit drugs, prescription medications, or alcohol, with opioid use disorders causing an epidemic across the country. These disorders are associated with numerous health issues (e.g., mental health, cancer, heart attack, stroke), and overdoses often result in emergency department visits and fatalities. Healthy People 2030 aims to prevent drug and alcohol misuse and ensure that individuals with substance use disorders receive the necessary treatment. There are numerous targeted goals (e.g., reduce the proportion of people who used heroin in the past year) and other more general goals. The general goals help to encompass large populations and support preventative measures to reduce SUD. The goal to reduce drug overdose deaths by 2030 is 20.7 per 100,000, meaning that the goal is to reduce drug overdose deaths to 20.7 people per 100,000 by 2030. As of the most recent update (2021), drug overdose deaths were 32.4 per 100,000 with deaths projected to increase. The goal to reduce the proportion of adults who used drugs in the last month has a goal of 12%, meaning that by 2030 the goal would be to have 12% or less of adults 18 years and over who reported use of illicit drugs in the past 30 days. The most recent data (2019), shows that 13.4% of individuals 18 years and over reported use of illicit drugs in the past 30 days, indicating a trend in a negative direction.

SUD affects an individual's health, relationships, and are complex and highly specific to the individual. Although effective treatments for substance use disorders exist, a significant number of individuals do not receive the care they need. Emphasis should be placed on implementing strategies to prevent substance use, especially among adolescents, and facilitating access to treatment can help reduce drug and alcohol misuse, associated health problems, and deaths. A substance use and suicide study done by Substance Abuse and Mental Health Services Administration (SAMHSA) in 2023 found that 1 in 4 adults in the U.S. used illicit drugs in the past year. Of the 70.5 million people living in America that used illicit drugs in 2023, 61.8 million used marijuana and 8.8 million used other drugs. Approximately 1 in 30 individuals misused central nervous system stimulants (e.g., cocaine, methamphetamines), with 1.4 million individuals misusing prescription CNS stimulants, a decrease from 1.5 million individuals in 2022.

According to the SAMHSA National Substance Use and Mental Health Services Survey (2022), there were 522 facilities in Pennsylvania that supported 62,942 clients. Of the clients supported in Pennsylvania, 84.7% of clients had both alcohol and other substance use disorders, compared to 82.6% nationwide. Across Pennsylvania, Fentanyl contributed to 78% of all fatal overdose deaths.

·························· **Alcohol** ··························

Alcohol misuse refers to drinking alcohol in a situation, amount, or frequency that could cause harm to the person who drinks or to those around them (e.g., binge drinking, heavy drinking, alcohol use disorder). These patterns of drinking can lead to numerous health issues, including liver disease, heart problems, and increased risk of accident and injury.

Prevalence, Risks, and Consequences of Alcohol Use (2022)		
	Total	**Percent of the Population**
Past-Year Alcohol Use	174,339,000	62.3%
DSM-5 Alcohol Use Disorder (AUD)	29,544,000	10.6%
Emergency Department Visits (all alcohol-related visits	4,936,690	1.8%
Alcohol-Related Deaths	140,557	0.1%

Source: National Institute on Alcohol and Alcoholism, 2022

"Substance use and disorder is an issue in this area. That's something that the community is working to address. Alcoholism is also an area of concern. Carbon County has a lot of issues with alcoholism. Especially during COVID, people that might have been going on bike rides or going to the movies were at home with nothing to do. These are both tied to mental health issues. When there's not enough support with mental health, people resort to self-medicating."

The National Institute on Alcohol and Alcoholism (2022) reported that 221.3 million people (78.5%) reported that they drank alcohol at some point in their lifetime. Of adults 18 years and older, 84.1% reported drinking alcohol at some point in their lifetime. Men aged 18 years and older are more likely to have consumed alcohol (85.9%) compared to women (82.4%). White adults (89.1%) are the most likely to have consumed alcohol at some point in their lives, compared to Mixed Race populations (84.6%), Hispanic or Latino (79.7%), Black or African American (75.8%), American Indian or Alaska Native (74.2%), and Asian (64.2%).

Pennsylvania's 2022 Behavioral Risk Factor Surveillance System (BRFSS) surveyed binge drinking, chronic drinking, and made an assessment about how many people in each county cluster would be at risk for a drinking problem. Binge drinking is "defined as a pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 g/dl or above. This typically happens when men consume five or more drinks or women consume four or more drinks in approximately two hours." The CDC reports that binge drinking is the most common, costly, and deadly pattern of excessive alcohol use in the United States. Binge drinking can be associated with unintentional car crashes, violence, sexually transmitted diseases, fetal alcohol spectrum disorders, cancer, and more. Chronic drinking is when someone drinks more than the recommended one (women) or two (men) drinks a day, and more than seven (women) and fourteen (men) drinks in a week. The binge drinking percentage in Pennsylvania was 17% of adults, chronic drinking was 6.5% of adults, and at risk for drinking problem was 6.6%.

In 2022, the Census Bureau released a County Business Patterns (CBP) report. One of the businesses assessed were liquor stores. Liquor stores are places primarily engaged in retailing liquor and packaged alcoholic beverages, like beer and wine. This excludes places preparing alcohol for consumption (e.g., bars, restaurants) or places that sell alcohol as a secondary retail product (e.g., gas stations, grocery stores). Carbon County has 18 liquor stores per 10,000 population and Schuylkill County has 30 per 10,000 population.

The 2024 County Health Rankings and Roadmaps report on excessive drinking and alcohol impaired driving deaths looked at excessive drinking measures by the percentage of the county's adult population that reports binge or heavy drinking in the past 30 days. Carbon County reported 17% of the adult population participated in binge or heavy drinking along with 18% in Schuylkill County.

The US Department of Transportation National Highway Traffic Safety released a 2022 report assessing alcohol-impaired driving. Drivers are considered to be alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher. Alcohol reduces brain function and impairs thinking, which can hinder driving. There were 29% of total traffic fatalities in Pennsylvania that were alcohol-impaired-driving traffic fatalities. The age group with the highest percent of alcohol-impaired drivers involved in fatal traffic crashes was ages 21-24.

According to CHNA survey respondents in the Rural West service area, 21.4% reported at least one day of binge or heavy drinking in the past 30 days, with 14.7% reporting 1-2 episodes in the past month and 6.7% had 3 or more episodes.

Stimulants

The CDC Drug Overdose Report (2002-2022) indicates that the age-adjusted rate of drug overdose deaths increased from 8.2 deaths per 100,000 standard population in 2002 to 32.6 in 2022. The age-adjusted rate of drug overdose deaths involving cocaine increased from 1.6 deaths per 100,000 standard population in 2002 to 8.2 in 2022. It is important to note that the rate in 2022 was 12.3% higher than the rate in 2021 (7.3). The age-adjusted rate of drug overdose deaths involving psychostimulants increased more than 34 times from 2002 (0.3) to 2022 (10.4).

Stimulants are dangerous and easily abused because they increase alertness, attention, and energy. An overdose of stimulants can result in symptoms such as rapid breathing, aggression, hallucinations, and overactive reflexes. The SAMHSA (Substance Abuse and Mental Health Services Administration) 2023 National Survey on Drug Use and Health reported that 1.8% of people in the United States 12 years and older used cocaine in the past year. This is highest among 26-29 years (3.7%) and 21-25 years (3.6%). An estimated 7.0% of people 12 years and older reported misuse of prescription stimulants in the past year. This is highest among people 26-29 years (4.2%) and 21-25 years (3.7%).

Stimulant Overdose Deaths per 100,000 CDC Drug Overdose Report (2002-2022)
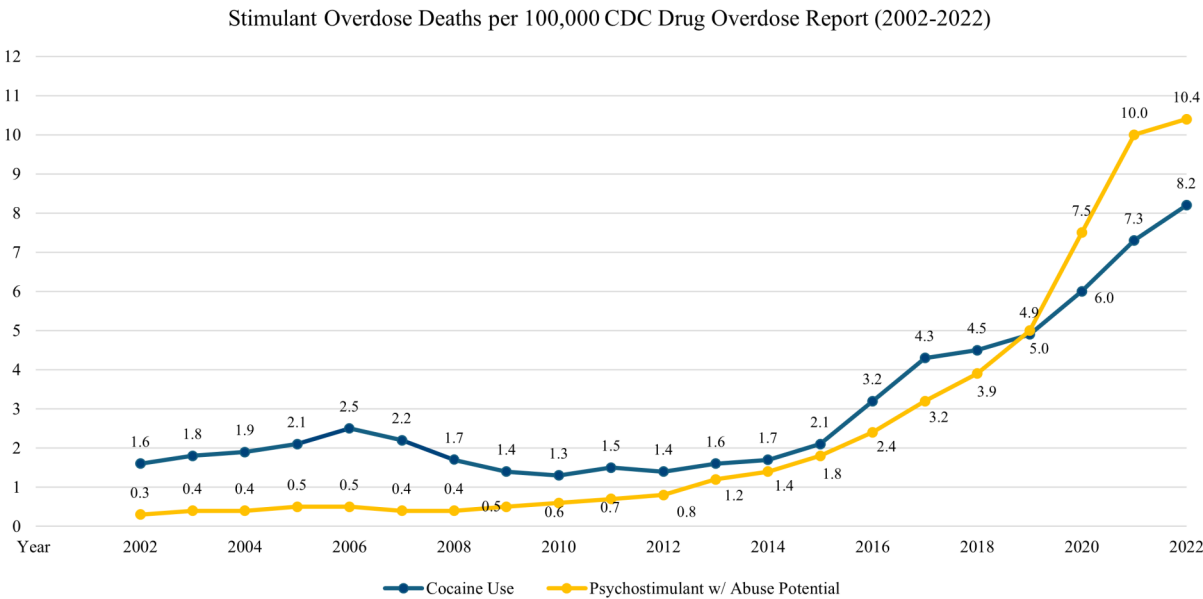
Tobacco

According to the Robert Wood Johnson 2024 County Health Rankings and Roadmaps report on adult smoking using data from 2021, cigarette smoking was an important data point to capture because it has been identified as a cause of various cancers, cardiovascular disease, and other adverse health outcomes. Measuring tobacco use can help St. Luke's and other health networks identify needs for smoking cessation and other smoking reduction programs. Adult smoking is measured as the percent of the adult population that report currently smoking every day or most days and have smoked at least 100 cigarettes in their lifetime.

In Pennsylvania, 15% of adults smoke cigarettes. In Carbon County, 20% of people smoke and Schuylkill County reports 21% of adults that smoke cigarettes. Additionally, secondhand smoke from burning tobacco products causes disease and physical harm for people who do not smoke. Some negative effects of secondhand smoke exposure include acute respiratory effects, coronary heart disease, stroke, lung cancer, and premature death.

Tobacco Usage by County, County Health Rankings (2024)	
County	Percent
Berks	18%
Bucks	15%
Carbon	20%
Lehigh	17%
Luzerne	20%
Monroe	17%
Montgomery	13%
Northampton	16%
Schuylkill	21%
Hunterdon	11%
Warren	14%
Pennsylvania	15%
New Jersey	11%
United States	15%

In 2023, the CDC reported on youth and tobacco use including data from the 2023 National Youth Tobacco Survey. CDC reports that tobacco use typically starts and is established during adolescence. Nearly 9 out of 10 adults who smoke cigarettes daily try smoking for the first time by age 18. In 2023, about 1 of every 100 middle school students (1.1%) reported that they had smoked cigarettes in the past 30 days and nearly 2 of every 100 high school students (1.9%) reported that they had smoked cigarettes in the past 30 days. For other tobacco products, 1.1% of middle school students reported using cigars, 0.7% reported using smokeless tobacco, 1.0% reported using hookah, 0.8% reported using heated tobacco products, and 0.4% reported using pipe tobacco. 1.8% of high school students reported using cigars, 1.5% reported using smokeless tobacco, 1.1% reported using hookah, 1.7% reported using nicotine pouches, 1.0% reported using heated tobacco products, and 0.6% reported using pipe tobacco.

When asked if respondents in the Rural West service area smoke, 24.3% of respondents indicated yes they smoke. Of those who smoke, cigarettes are the most common (10.1%), followed by marijuana (5.4%), vape (3.8%), CBD (2.3%), cigars (1.5%), e-cigarettes (0.5%), snuff (0.5%), chewing tobacco (0.3%), and hookahs (0.3%). Less than 0.4% of respondents used snus or pipes.

·························· Vape ··························

Vaping is another form of smoking nicotine, a highly addictive substance that is especially harmful to children and adolescents. Vapes, also known as e-cigarettes or electronic cigarettes, are electronic devices that heat a liquid and produce an aerosol or mix of small particles in the air. The National Center for Health Statistics (2021) reported that 4.5% of all adults 18 and older currently use e-cigarettes, with men using e-cigarettes more frequently than women. Individuals aged 18-24 are the most frequent adult users of e-cigarettes, with 11.6% of men and 10.3% of women aged 18-24 years old using e-cigarettes.

Nicotine is most harmful for children and adolescents because the substance hinders brain development, which does not occur until approximately 25 years old. Particularly, nicotine impacts attention, learning, mood, and impulse control, all of which are built in and refined through childhood. The CDC found that flavorings in tobacco products can make them more appealing to youth. In 2021, 80.2% of high school students and 74.6% of middle school students who used tobacco products in the past 30 days reported using a flavored tobacco product during that time. In 2023, these numbers increased with 90.3% of high school students and 87.1% of middle school students having used a flavored tobacco product during that time. When looking at overall electronic cigarette use — including unflavored products, the CDC and National Youth Tobacco survey reported about 1 out of every 22 middle school students (4.6%) have used electronic cigarettes in the past 30 days. Additionally, 1 of every 10 high school students (10.0%) report that they had used electronic cigarettes in the past 30 days.

The 2023 PAYS data indicated that 19% of students in Pennsylvania used an e-cigarette or vape within the last 30 days. While 81.1% of 6th grade respondents felt that electronic vapor/e-cigarettes are moderately or greatly risky for your health, that percentage decreased to only 76.3% of 12th grade students believing that e-cigarettes are moderately or greatly threatening to their health. When asked where they purchased their vaping products, 3.6% bought it from the internet, 17.1% gave someone money to buy it for them, 12.9% took it from someone, and 24.5% reported getting it from somewhere else.

Marijuana

Marijuana is a psychotropic drug that is commonly used throughout the United States. In the short-term, marijuana can alter senses, change mood, impair memory, and impair body movement. In the long-term, marijuana can affect thinking, memory, and learning functions crucial to brain development. Marijuana can also have physical effects which result in breathing problems and increased heart rate. The SAMHSA (Substance Abuse and Mental Health Services Administration) 2023 National Survey on Drug Use and Health indicated that 21.8% of people 12 and older used marijuana in the past 12 months during 2023. Marijuana use was highest among people 21-25 (38.1%) followed by people 26-29 (29.6%).

In the Rural West service area, 5.4% indicated use of marijuana, which is a 1.2% increase from respondents to the 2022 CHNA survey. Usage was higher for male (8.3%) compared to female respondents (4.1%). When looking at overall health status, of those reporting marijuana use, 6.0% of respondents reported excellent overall health compared to 3.1% that reported very good health, 5.0% that reported good health, 15.2% that reported poor health, and 16.7% of respondents that reported very poor health.

Opioids

The CDC reports that the opioid epidemic in the United States occurred in three phases. First, prescription opioids increased in the 1990s with overdose deaths continually increasing since 1999. The second phase began around 2010 with increased overdoses involving heroin. Heroin is an alternative to prescription opioids due to its similar effect on the body. The third phase began in 2013 with the introduction of synthetic opioids (e.g., illicitly manufactured fentanyl). The CDC provides descriptions on the most commonly used opioids: prescription opioids, fentanyl, and heroin. Prescription opioids can be used to treat pain and are often prescribed following surgery, an injury or to manage a disease like cancer. However, there has been a dramatic increase in the prescription of opioids for chronic pain such as back pain or osteoarthritis, despite serious risks and the lack of evidence about their long-term effectiveness. Prescription opioids are highly addictive and incredibly difficult to stop using. Common prescription opioids are Methadone, Oxycodone (OxyContin), Hydrocodone (Vicodin), and Benzodiazepines such as alprazolam (Xanax) and diazepam (Valium). According to the Pennsylvania Department of Health (2024), there were 58,065 emergency department visits for opioid overdose from January 2018-January 2024. During that same time frame, 100,128 calls were made to the PA Get Help Now Hotline and there were 9,499 cases of neonatal abstinence syndrome.

Fentanyl produced pharmaceutically is a synthetic opioid used to treat severe pain. It is 50 to 100 times more potent than morphine. However, the increase in overdose has been linked to illegally made fentanyl which has a heroin-like effect. According to the Pennsylvania Department of Health (2024) of the 4,719 overdose deaths in 2023, 82.9% were opioid-related and 76.4% involved fentanyl.

Heroin is an illegal and highly addictive drug that is typically injected. This increases the risk of serious infections like HIV, Hepatitis C, Hepatitis B, and bacterial infections. According to the National Center for Drug Abuse Statistics, approximately 14,000 people in the United States die from a heroin overdose every year. More than 6.25 million Americans have used heroin in their lifetime, and 902,000 use heroin each year. This is problematic because heroin is typically used with other substances, which can increase the risk of an overdose. The Pennsylvania Health Care Cost Containment Council (PHC4) collects data for each calendar year (CY) on opioid overdose hospital admissions and opioid use disorder (OUD) hospital admissions. In CY 2023, there were 21.4 hospital admissions for an opioid overdose per 100,000 people and 281.1 hospital admissions with opioid use disorder per 100,000 people in Pennsylvania.

In Carbon County there were 28.8 hospital admissions for an opioid overdose per 100,000 people and 499.6 hospital admissions with opioid use disorder per 100,000 people. In Schuylkill County there were 9.9 hospital admissions for an opioid overdose and 303.9 hospital admissions with opioid use disorder per 100,000 people.

Opioid use while pregnant can have severe negative outcomes for the child, potentially resulting in Neonatal Abstinence Syndrome (NAS). NAS births occur in a newborn who was exposed to addictive substances while in the mother's womb. The most common opiate drugs that are associated with NAS are heroin, codeine, oxycodone (oxycontin), methadone and buprenorphine. The effects of NAS usually occur within 48-72 hours of birth and newborns can suffer from symptoms including withdrawal, tremors, vomiting, and fever. According to the Pennsylvania Department of Health (2024), there were 9,499 cases of NAS from January 2018-January 2024. According to the PH4C there were 934 NAS cases across the state of Pennsylvania (8.0 per 1,000). Of the counties in the Rural West service areas that reported NAS births per 1,000, Carbon County has a rate of 9.6 NAS births per 1,000 births and Schuylkill County has a rate of 10.6 NAS births per 1,000 births.
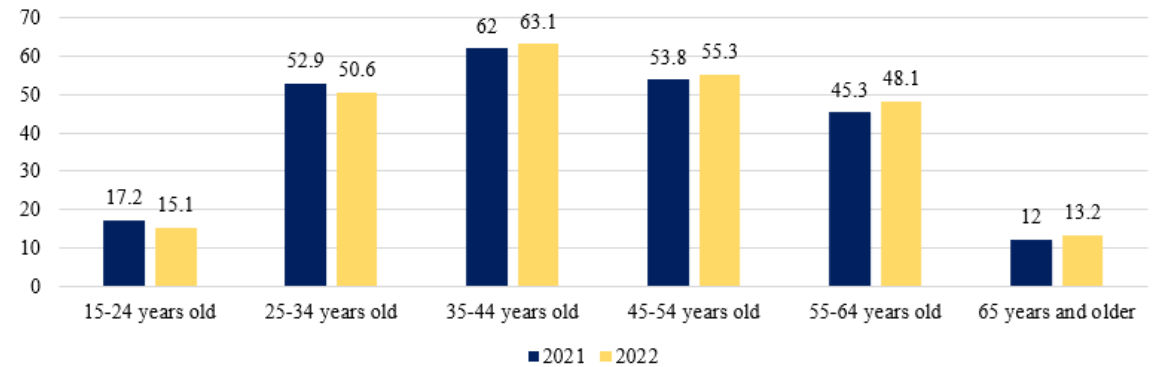
In 2021, a large opioid settlement was reached through a series of agreements between major pharmaceutical companies and U.S. state and local governments to resolve lawsuits related to the opioid crisis (nationalopioidsettlement.com). These settlements, involving companies like Johnson & Johnson, McKesson, Cardinal Health, and AmerisourceBergen, total billions of dollars. For example, a notable settlement in 2021 saw four companies agree to pay $26 billion over several years. The funds from these settlements are intended to support opioid addiction treatment, prevention programs, and other remediation efforts to address the widespread impact of the opioid epidemic. This historic settlement aims to provide much-needed resources to communities affected by opioid addiction and hold companies accountable for their role in the crisis.

Opioid Overdose and Opioid Use Disorder (Pennsylvania Health Care Cost Containment Council, 2023)				
	Hospitalizations for Opioid Overdose		Hospitalizations with Opioid Use Disorder	
County	Number	Rate per 100,000 (15+ years old)	Number	Rate per 100,000 (15+ years old)
Berks	114	32	913	256.2
Bucks	103	18.9	1,532	281.6
Carbon	16	28.8	278	499.6
Lehigh	79	25.6	1,115	360.7
Luzerne	50	18.3	573	210
Monroe	13	9.2	500	354.3
Montgomery	114	15.8	1,442	200.3
Northampton	42	15.5	1,056	390.4
Schuylkill	12	9.9	367	303.9
Pennsylvania	2,312	21.4	30,404	281.1

Overdose

Overdose is inextricably linked to substance use disorders, and is a growing concern with increasing prevalence rates, especially during the pandemic. Drug overdose deaths are a leading contributor to premature death and are largely preventable. According to the CDC, the number of drug overdose deaths has increased from 17,500 per year in 2000 to 70,000 in 2017, which can be largely attributed to opioids. The NORC, National Opinion Research Center, reports on drug overdose deaths in the United States. From 2018-2021, there was a rate of 36.8 drug overdose deaths per 100,000 people in the U.S. aged 15-64 years old. The rate in Pennsylvania is 55.8 (ranking 5th out of 50 states), with Carbon County at 84.1 per 100,000 people and Schuylkill County at 65.9 per 100,000 people.
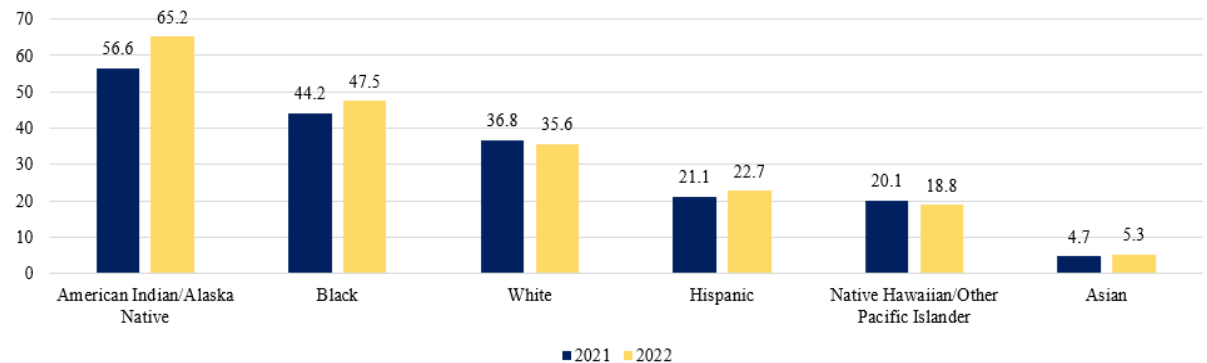
Rate of Drug Overdose Deaths, by Age Group United States (NCHS, 2024)

Age Group	2021	2022
15-24 years old	17.2	15.1
25-34 years old	52.9	50.6
35-44 years old	62	63.1
45-54 years old	53.8	55.3
55-64 years old	45.3	48.1
65 years and older	12	13.2

Rate of Drug Overdose Mortality (National Opinion Research Center, 2018-2021) — All Drug Overdoses

Region	Rate (per 100,000)
Berks	43.1
Bucks	52.7
Carbon	84.1
Lehigh	43.8
Luzerne	79.2
Monroe	49.6
Montgomery	38.0
Northampton	47.9
Schuylkill	65.9
Hunterdon	21.2
Warren	44.5
Pennsylvania	55.8
New Jersey	46.9
United States	36.8

Rate of Drug Overdose Deaths, by Race and Hispanic Origin United States (NCHS, 2024)

Race/Hispanic Origin	2021	2022
American Indian/Alaska Native	56.6	65.2
Black	44.2	47.5
White	36.8	35.6
Hispanic	21.1	22.7
Native Hawaiian/Other Pacific Islander	20.1	18.8
Asian	4.7	5.3

According to the National Center for Health Statistics (2024), the age-adjusted drug overdose deaths increased from 8.2 per 100,000 standard population in 2002 to 32.6 in 2022. The rate decreased between 2021 and 2022 for people ages 15-34 years old and increased for individuals aged 35 and older. For White non-Hispanic and Native Hawaiian or Other Pacific Islander non-Hispanic individuals, age-adjusted rates of drug overdose deaths were lower in 2022 than in 2021, while they increased for American Indian and Alaska Native non-Hispanic, Black non-Hispanic, Hispanic, and Asian non-Hispanic populations.

Rural West Service Area

Rural Substance Use

Substance use and misuse is commonly thought to be a city problem. However, it has been a growing problem in rural areas for many years. Rural adults have higher rates of use for tobacco and methamphetamines, while prescription drug misuse and heroin use has grown in all town sizes. Some factors contributing to substance use in rural areas are poverty, unemployment, education, lack of access to mental healthcare, and isolation. Substance use can be especially hard to treat in rural areas as the communities often have limited resources for prevention, treatment, and recovery. SAMHSA's National Survey on Drug Use and Health (NSDUH) found four areas where substance use is higher among non-metro areas than small metro and large metro areas: cigarette smoking, smokeless tobacco, misuse of opioids and methamphetamine use. In non-metro areas, binge alcohol use is 5.4% compared to 4.7% and 4.8% in small metro and large metro areas, respectively. Cigarette smoking is 21.9% in non-metro areas compared to 18.1% and 15.4% in small metro and large metro areas, respectively. Smokeless tobacco use is 6.2% in non-metro areas compared to 3.8% and 2.4% in small metro and large metro areas, respectfully. Misuse of opioids is 3.5% in non-metro areas compared to 3.0% and 3.1% in small metro and large metro areas, respectfully. Lastly, methamphetamine use is 1.5% in non-metro areas compared to 0.9% and 0.8% in small metro and large metro areas, respectively. These statistics show that geography does not make anyone immune to substance use, as it is a national issue.

Stigma

Stigma is another important component to substance use disorder regarding usage and receiving or accessing help. The Cambridge Dictionary defines stigma as "a strong feeling of disapproval that most people in a society have about something." Stigma may be a barrier to seeking help for people suffering from substance use disorders due to shame or fear of disapproval from family, friends, or others. Public stigma can lead to self-stigma, where individuals with substance use disorders internalize negative stereotypes from society, making these views part of their self-identity. Those with opioid use disorder often come to believe they are not valued members of society, which can cause feelings of guilt, self-loathing, shame, and despair. This self-stigma can result in various negative mental and physical health outcomes, such as increased anxiety and depression, a lower quality of life, and reluctance to seek social support or substance use treatment.

In Pennsylvania, significant efforts have been made to reduce stigma associated with mental health and substance use disorders. The "Life Unites Us" campaign, in collaboration with the Pennsylvania State Data Center, has been instrumental in helping to understand stigma across the state. The Get Help Now hotline is a toll-free hotline available 24 hours a day, seven days a week, to help individuals suffering from addiction.

Naloxone

Naloxone is a drug that can quickly reduce the effects of an opioid overdose. The National Institute of Drug Abuse define naloxone as "an opioid antagonist—meaning that it binds to opioid receptors and can reverse and block the effects of other opioids. It can very quickly restore normal respiration to a person whose breathing has slowed or stopped because of overdosing with heroin or prescription opioid pain medications." Naloxone is safe and can be administered in three ways: injected, auto injected, or as a nasal spray. It is important to train people in numerous contexts (e.g., healthcare workers, community members, first responders, family members) to understand how to administer naloxone as it can quickly save someone's life. With the grant, along with funding from Lehigh County Authority on Drugs and Alcohol to fund our Sacred Heart Initiative, St. Luke's ran an urban (St. Luke's Sacred Heart) and rural (St. Luke's Miners Campus) pilot, which has educated and distributed naloxone to the community since 2018.

The Pennsylvania Department of Health signed a standing order for all residents to get Naloxone from their local pharmacies without a personal prescription. Both states also has a mail-to-home Naloxone program, allowing individuals to receive medication after a short online training. In Pennsylvania, community organizations and first responders can also request Naloxone at no cost through the Pennsylvania Overdose Prevention Program (POPP). *Disclaimer: St. Luke's University Health Network is the lead partner collaborating on a RCORP psychostimulant grant to improve treatment and recovery services*

Warm Hand Off

WHO is an initiative to support the continuum of care for patients in need of multiple services and providers. It is a transfer of care between providers with the patient (and potentially family) present to ensure clear communication, transparency, and helps to build relationships between patients and providers. St. Luke's collaborates with local community-based organizations and local county to support WHO efforts. During 2024 at SLUHN Hospitals, a total of 1,776 WHO were conducted for alcohol, cannabis, cocaine, opioids, and other stimulants.

Vulnerable Populations

Substance use in children and adolescents can have a significant impact on their health and well-being. Substance use can affect growth and development, especially brain development, lead to risky behaviors such as unprotected sex and dangerous driving, as well as contribute to health problems in adulthood (e.g., heart disease, sleep disorders).

In 2023, PAYS found that lifetime use of substances among youth across the state was 28.9% alcohol use, 11.6% marijuana use, and 3.0% prescription pain medication. Students often view these drugs as safer than illicit drugs because they are prescribed by a doctor or available legally for adults. Small portions of the state used inhalants, heroin, ecstasy, and synthetic drugs. Carbon County had a rate of lifetime alcohol use (33.2%) and marijuana use (13.1%). Schuylkill County had a rate of lifetime alcohol use (31.0%) and marijuana use (10.4%). Both counties had the highest rate of lifetime substance for alcohol.

Lifetime Substance Use by County, PAYS (2023)

	Berks	Bucks	Carbon	Lehigh	Luzerne	Monroe	Montgomery	Northampton	Schuylkill	Pennsylvania
Alcohol	28.9%	29.0%	33.2%	22.5%	24.6%	27.0%	27.9%	29.8%	31.0%	28.9%
Marijuana	11.6%	11.1%	13.1%	8.4%	9.2%	10.9%	10.2%	11.9%	10.4%	11.6%
Prescription Pain Medication	2.6%	2.5%	2.5%	2.6%	3.0%	4.0%	2.5%	3.2%	2.8%	3.0%
Synthetic drugs	1.2%	1.4%	1.6%	1.1%	0.9%	1.5%	1.4%	1.3%	1.1%	1.4%
Ecstasy or Molly	0.4%	0.4%	0.3%	0.4%	0.4%	0.5%	0.4%	0.6%	0.5%	0.5%
Hallucinogens	1.5%	1.7%	1.9%	1.3%	1.3%	1.6%	1.4%	1.9%	1.7%	1.9%
Inhalants	4.0%	3.6%	4.6%	3.9%	3.7%	4.6%	3.9%	4.7%	4.1%	4.0%

Rural West Service Area

Social and Community Context

Social and community context is the basis for people's relationships and interactions with family, friends, co-workers, and community members. Negative social and community context can lead to unsafe neighborhoods, discrimination, chronic stress, poor mental health, and limited access to healthcare, which can lead to negative health outcomes. Healthy People 2030 focuses on improving health and safety in the places where people are born, live, learn, work, play, worship, and age. These objectives are designed to address social and community context as a social determinant of health, recognizing the economic and societal factors are intrinsically linked to health outcomes.

According to Healthy People 2030, the following objectives are social and community context and are measured at the national level. Most Healthy People 2030 objectives are core, or measurable, objectives that are related to targets outlined for the decade (2020-2030). Evidence-based interventions are supported through national, state, and local initiatives. Progress is measured using a variety of data sources (e.g., US Census, ACS estimates, state and county data) and is measured using the following indicators: Baseline only, target met or exceeded, improving, little or no detectable change, getting worse. The objectives outlined have corresponding updates at the national level as of June 2024.

Baseline Only: We don't yet have data beyond the initial baseline data, so we don't know if we've made progress.

Target met or exceeded: We've achieved the target we set at the beginning of the decade.

Improving: We're making progress toward meeting our target.

Little or no detectable change: We haven't made progress or lost ground.

Getting worse: We're farther from meeting our target than we were at the beginning of the decade.

Healthy People 2030 objectives for Social and Community Context	Baseline	Target	Most Recent Data	Progress (June 2024)
Increase the proportion of adults who talk to family or friends about their health	86.9% aged 18+ years (2017)	92.3%	79.6% (2022)	Getting worse
Reduce the proportion of children with a parent or guardian who has served time in jail or prison	7.7% 17 years and younger (2016-17)	5.2%	6.5% (2020-21)	Improving
Increase the proportion of adolescents who have an adult they can talk to about serious problems	79.0% aged 12-17 years (2018)	82.9%	78.3% (2019)	Little or no detectable change
Increase the proportion of people with diabetes who get formal diabetes education	51.7% aged 18+ years (2017)	55.2%	48.0% (2022)	Little or no detectable change
Increase the proportion of children and adolescents who communicate positively with their parents	68.5% aged 6-17 years (2016-17)	73.0%	62.0% (2020-21)	Getting worse
Increase the proportion of adults whose health care provider checked their understanding	26.6% aged 18+ years (2017)	32.2%	26.3% (2021)	Little or no detectable change
Increase the proportion of local jurisdictions that have a health improvement plan	67.2% (2016)	71.8%	65.0% (2022)	Little or no detectable change

Rural West Service Area

Social Associations

Social association is a measure of the emotional and social support available to an individual. Social associations are often an organized group of individuals who come together based on shared interests, goals, or purposes. These groups typically have a structured system with rules, leadership, and membership. They can include professional, cultural, recreational, or political organizations and play a vital role in building community bonds and fostering collective action. Examples from County Health Rankings include: activity programs for older adults, community arts programs, community centers, cross-age youth mentoring programs, extracurricular activities for social engagement, grocery/housing/utilities cooperatives, intergenerational communities, intergenerational mentoring and activities, land return for tribal restitution, neighborhood associations, and more.

Limited social interactions and minimal community involvement are linked to higher rates of illness and premature death. Studies indicate that the health risks of social isolation are comparable to those of smoking. Additionally, social support networks are strong predictors of health behaviors, with individuals lacking a robust social network being less likely to adopt healthy lifestyle choices. People in areas with high social trust are less likely to report poor health compared to those in areas with low social trust. It is suggested that social trust is bolstered when individuals participate in voluntary groups and organizations, as these memberships foster trust among group members.

The social associations indicator from County Health Rankings and Roadmaps measures the number of membership associations per 10,000 population. According to 2024 County Health Rankings, U.S. top performers scored eighteen for social associations, while Pennsylvania social association score was 11.8 —falling below U.S. performers and bringing to light the need for more social supports and community building in our service areas. In the Rural West service area, Carbon County has a social association score of 13.3 and Schuylkill County has a social association score of 12.9.

One-Person Households by Age and Sex U.S. Census Current Population Survey (2024)		
Age	Male	Female
15-64 years	30.9%	27.6%
65-74 years	8.6%	12.6%
75+ years	6.1%	14.2%

The U.S. Census Bureau, Current Population Survey, released a 2024 report on America's Families and Living Arrangements from 1970 to 2022. In 2022, men aged 15-64 made up the largest share of one-person households (30.9%) while females were the most likely to be in a one-person household aged 75 years and older. The report also highlighted that the proportion of households consisting of a single person has increased significantly over the decades, with about 28% of all households being one-person households in 2022. Additionally, the data revealed that the number of young adults aged 18-24 living with their parents has risen, with 57% of men and 55% of women in this age group residing in their parental homes. According to the Pew Research Center (2019), economic factors such as rising housing costs and student debt have made it more challenging for young adults to afford independent living. This trend reflects broader changes in economic conditions and social norms over the past few decades, including delayed marriage and extended education becoming more common, leading to more young adults staying in their parental homes longer. While this can lead to positive social associations within multigenerational households, it can also limit social associations for young adults through increased family household connectedness and expectations.

Social vulnerability refers to the demographic and socioeconomic factors that can negatively affect communities. The CDC Social Vulnerability Index (SVI) is a tool designed to help public health officials and emergency response planners identify communities that may need support before, during, or after disasters. By using 16 U.S. Census variables, the SVI assesses the resilience of communities when confronted with external stresses on human health, such as natural disasters or disease outbreaks. The index ranks each community on a scale from 0 to 1, with higher values indicating greater vulnerability. This ranking helps prioritize resources and interventions to the most at-risk populations, ensuring that aid is distributed effectively and equitably.

The SVI is divided into four major themes, each encompassing specific indicators:

Socioeconomic Status: This theme includes indicators such as poverty, unemployment, income, and education level. These factors influence a community's ability to prepare for, respond to, and recover from disasters.

Household Composition and Disability: This theme considers variables like age (e.g., elderly and children), single-parent households, and disability status. These groups may require additional assistance during emergencies due to physical or logistical challenges.

Minority Status and Language: This theme encompasses racial and ethnic minority status and English language proficiency. Language barriers and systemic inequalities can affect access to resources and information during a crisis.

Housing Type and Transportation: This theme looks at housing structures (e.g., multi-unit structures, mobile homes), crowding, and access to transportation. These factors can impact evacuation processes and the ability to shelter in place safely or to seek refuge when faced with a natural disaster or other emergency.

Carbon County has a social vulnerability index of 0.3 and Schuylkill County has a social vulnerability index of 0.45. Understanding SVI is important because it helps to identify demographic groups and geographic locations with higher vulnerability to environmental and public health hazards. Reducing social vulnerability can minimize the impacts of stressors and disasters, decreasing human suffering and economic loss.

Social Vulnerability Index CDC, 2022	
County	SVI
Berks	0.62
Bucks	0.08
Carbon	0.3
Lehigh	0.63
Luzerne	0.61
Monroe	0.31
Montgomery	0.2
Northampton	0.29
Schuylkill	0.45
Hunterdon, NJ	0.03
Warren, NJ	0.22

"We see that mentality of putting other things aside, like investing in your education, in order to make necessary choices to feed their families."

Domestic Violence

Domestic violence is a pervasive issue in the United States, affecting millions of individuals each year. It encompasses physical, sexual, emotional, economic, and psychological abuse, often used by one partner to exert control over another. The CDC defines domestic violence, or intimate partner violence, as the "physical violence, sexual violence, stalking, and psychological aggression (including coercive acts) by a current or former intimate partner". Nationally, approximately one in four women and one in nine men experience severe intimate partner violence. The Pennsylvania Coalition Against Domestic Violence (PCADV) reports that in 2022 alone, 104 victims lost their lives due to domestic violence. Additionally, Pennsylvania's domestic violence programs serve approximately 90,000 individuals annually, providing crucial support and resources to victims and their children. Despite these efforts, the demand for services often exceeds available resources, highlighting the ongoing need for increased support and funding.
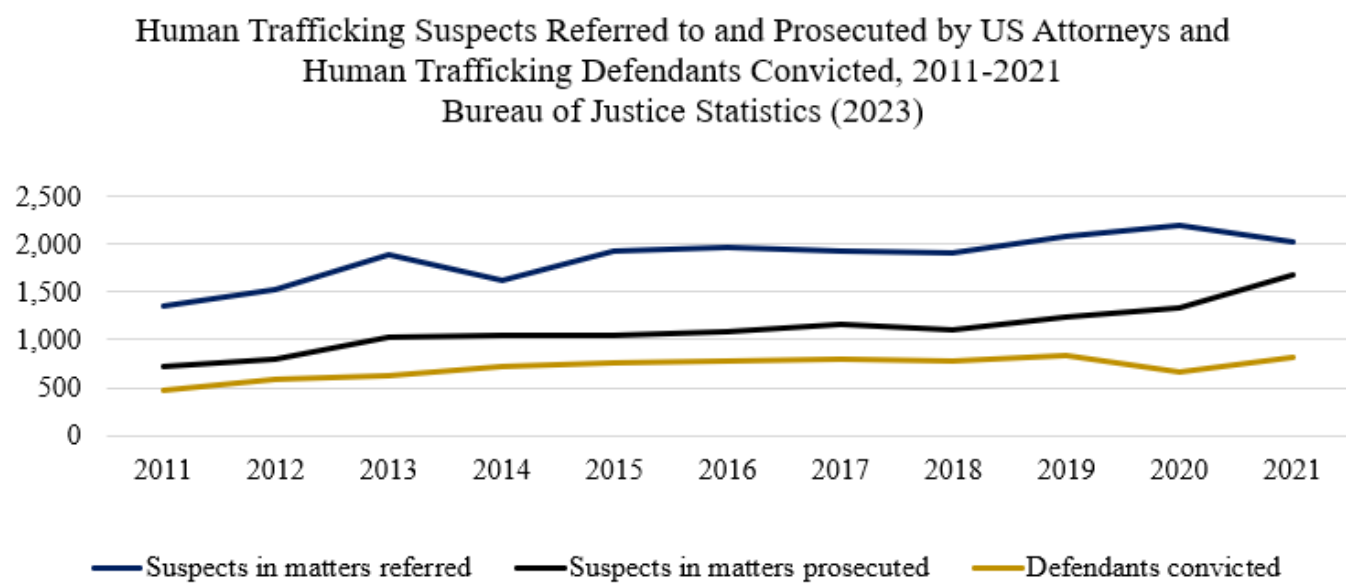
Of Rural West service area CHNA survey respondents, 11.6% reported ever being hit, slapped, kicked, or otherwise physically hurt by their partner or someone important to them. Of those respondents, 7.5% reported that it was their spouse, 43.8% their ex-spouse, 14.4% their partner, 2.5% a stranger, and 31.9% reported being physically hurt by someone else. There were 22.2% of survey respondents that reported ever being emotionally abused by their partner or someone important to them. These results indicate an important need in the community, and care, both physical and mental support, should be available to support victims of domestic violence.

Human Trafficking

Human trafficking is a serious crime and a grave violation of human rights. It involves the recruitment, transportation, transfer, harboring, or receipt of persons through force, fraud, or coercion for the purpose of exploitation. This exploitation can take many forms, including forced labor, sexual exploitation, and involuntary servitude. Victims of human trafficking are often subjected to physical and psychological abuse, and they may be forced to work in inhumane conditions. The crime affects millions of people worldwide, cutting across age, gender, and nationality. Combating human trafficking requires a coordinated effort from governments, organizations, and communities to protect victims and bring perpetrators to justice.

The Trafficking in Persons Report by the US Department of State provides a comprehensive overview of human trafficking globally. According to the Bureau of Justice Statistics, the number of persons prosecuted for human trafficking offenses in the United States more than doubled between 2011 and 2021. In 2011, a total of 2,027 persons were referred to US attorneys for human trafficking offenses, a 49% increase from 1,360 persons in 2011. Of the 1,197 defendants charged in federal court for human trafficking offenses, 92% were male, 60% were white, 20% were Black, 16% were Hispanic, 95% were US citizens, and 68% had no prior convictions. Of the 201 defendants charged with peonage, slavery, forced labor, and sex trafficking, 77% were male and 58% were Black. Of the 582 defendants charged with sexual exploitation and other abuse of children, 92% were male and 72% were white.

According to the 2023 Trafficking In Persons Report, sex trafficking includes activities involved when a trafficker uses force, fraud, or coercion to compel another person to engage in a commercial sex act or causes a child to engage in a commercial sex act. There are three elements that are required to establish a sex trafficking crime: "acts," "means," and "purpose". The "acts" element of sex trafficking is met when a trafficker recruits, harbors, transports, provides, obtains, patronizes, or solicits another person to engage in commercial sex. The "means" element of sex trafficking occurs when a trafficker uses force, fraud, or coercion. The "purpose" element is a commercial sex act. These three elements apply to all sex trafficking crimes except in cases of child sex trafficking where the means are irrelevant. The 2021 Federal Human Trafficking Report for Pennsylvania showed that there were 53 active defendants of human trafficking crimes, 98% were sex trafficking. Of these 53 human trafficking crimes, 44% of the victims are adults, 55% are minors, and 100% are female.

Human Trafficking Suspects Referred to and Prosecuted by US Attorneys and Human Trafficking Defendants Convicted, 2011-2021
Bureau of Justice Statistics (2023)

Health Outcomes

Morbidity, mortality, and life expectancy are key health outcomes that help determine the overall health of the populations we serve. According to the National Vital Statistics System, the average life expectancy in the U.S. is 77.5 years old and the age adjusted death rate in 2022 was 798.8 per 100,000. In Pennsylvania, the life expectancy is 78.4 years old. The range of life expectancy in the counties of Pennsylvania is 74.9-83. Pennsylvania Department of Health registered 155,457 total deaths, representing an age adjusted rate of 813.8 per 100,000 population.
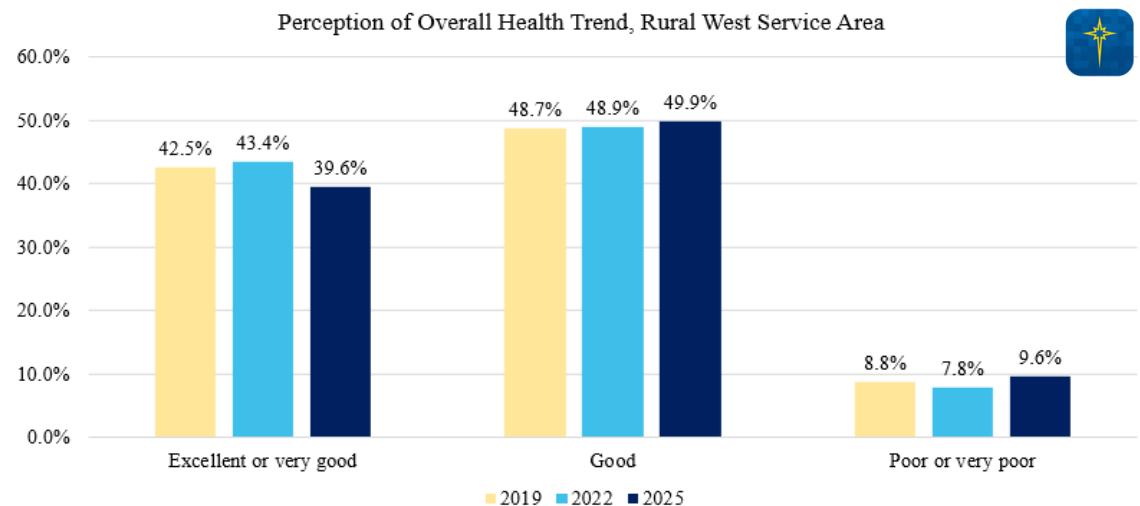
In 2023, the 10 leading causes of death made up 73.8% of all deaths in the U.S. The CDC reported the top 10 leading causes of death (in order): heart disease; cancer; accidents (unintentional injuries); stroke (cerebrovascular diseases); chronic lower respiratory diseases; Alzheimer's disease; diabetes; nephritis, nephrotic syndrome, and nephrosis; chronic liver disease and cirrhosis; COVID-19.

Robert Wood Johnson Foundation County Health Rankings data (2021) reports a premature death health outcome, which measures the age-adjusted years of potential life lost before age 75 per 100,000 population. Years of potential life lost rate in Pennsylvania was 8,000 deaths per 100,000 and 6,000 deaths for U.S. top performers. Carbon County has a rate of 10,000 deaths per 100,000 and Schuylkill county has the highest rate with 10,200 deaths per 100,000.

Finally, low birthweight is another health outcome that can contribute to life expectancy. Low birthweight is measured by the percentage of live births who are under 2,500 grams (5 pounds, 8 ounces), which can be an indicator for future health problems such as cardiovascular disease, respiratory conditions, and visual, auditory, intellectual, and developmental impairments. In Pennsylvania, the rate is 13 per 1,000 population. Carbon County has a birthrate of 15 births per 1,000 population and Schuylkill County has a birthrate of 19 births per female population ages 15-19. In addition to the impact of teen pregnancy on mothers, the prevalence of low birthweight in teen pregnancy is significant.

Perceptions of Health

It is important to assess a community's perceived sense of health status to interpret their overall well-being, as well as highlight areas where health education would benefit the community. According to the CHNA survey, most individuals in the Rural West service area reported good health (49.9%), followed by excellent or very good (39.6%), and poor or very poor (9.6%). There was a shift in responses, with a 3.8% decrease from 2022 in respondents claiming to have excellent or very good health, while there was only a small increase in poor or very poor health (1.8% increase). This indicates the importance of health promotion, education, and prevention to support the overall health needs of the community.
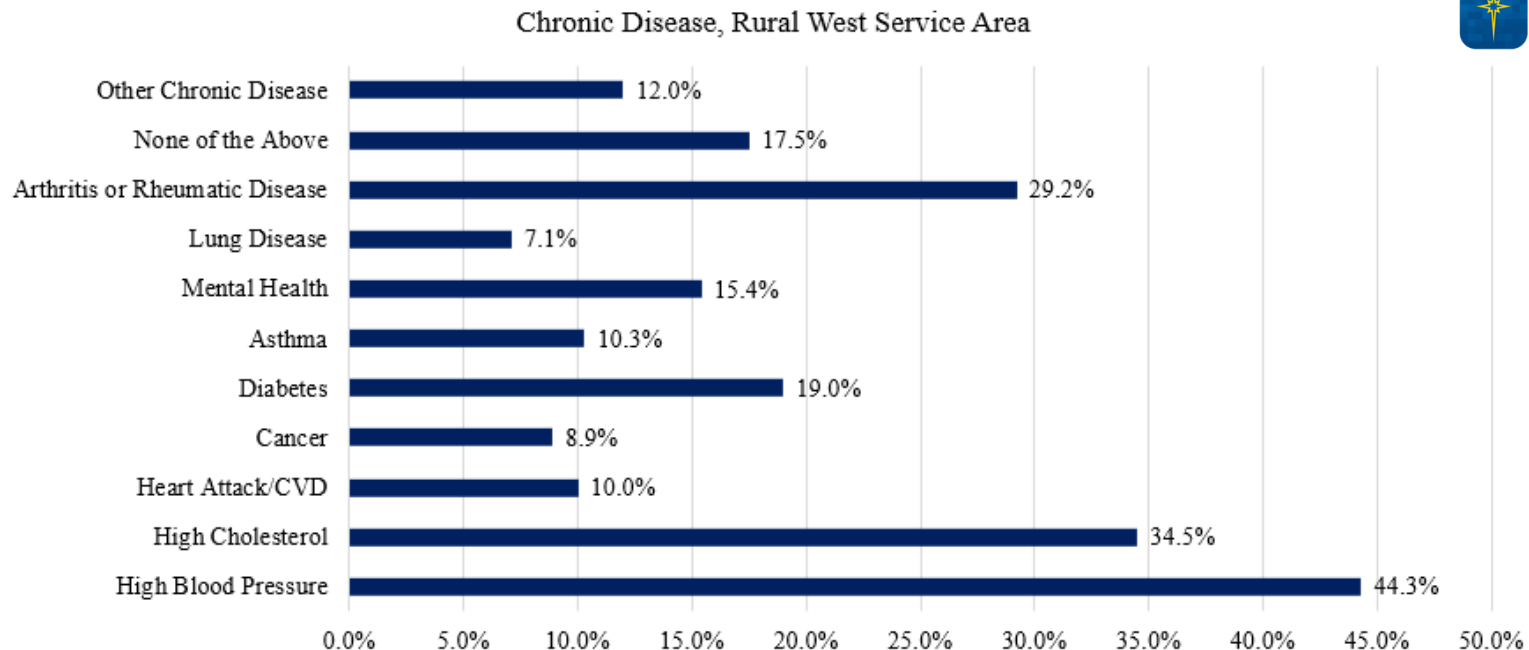

Perception of Overall Health Trend, Rural West Service Area

	Excellent or very good	Good	Poor or very poor
2019	42.5%	48.7%	8.8%
2022	43.4%	48.9%	7.8%
2025	39.6%	49.9%	9.6%

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Rural West Service Area

Chronic Disease

According to the CDC, chronic diseases are a significant public health concern in the United States, accounting for seven out of ten deaths annually. Conditions such as heart disease, cancer, and diabetes are prevalent, with heart disease accounting for one in three deaths annually. In Pennsylvania, approximately 30% of adults have been diagnosed with high blood pressure, a major risk factor for heart disease. These statistics highlight the urgent need for targeted public health interventions to manage and prevent chronic diseases at both state and national levels.

A 2024 study, analyzing data from the 2022 National Health Interview Survey (NHIS) concluded that more than half of all U.S. adults have at least one chronic disease, and more than 1 in 4 have multiple chronic conditions. Among the most common chronic conditions, diabetes, hypertension, and hyperlipidemia frequently plague U.S. adults leading to a myriad of health complications and a heavy burden on the healthcare system, with 90% of the nation's $4.5 trillion in health care expenditures annually going toward care of chronic disease and mental health conditions.

The 2025 CHNA survey results indicated that 44.3% of the Rural West service area respondents have high blood pressure, followed by high cholesterol (34.5%), and arthritis or a rheumatic disease (29.2%). Of respondents ages 45 years and older in the Rural West service area, 87.2% have one or more chronic disease.

Chronic Disease, Rural West Service Area

Condition	Percentage
Other Chronic Disease	12.0%
None of the Above	17.5%
Arthritis or Rheumatic Disease	29.2%
Lung Disease	7.1%
Mental Health	15.4%
Asthma	10.3%
Diabetes	19.0%
Cancer	8.9%
Heart Attack/CVD	10.0%
High Cholesterol	34.5%
High Blood Pressure	44.3%

"With chronic disease, we are so focused on treatment and not prevention. We need more access to healthy foods. Food is medicine and what we are ingesting is not always great for our body."
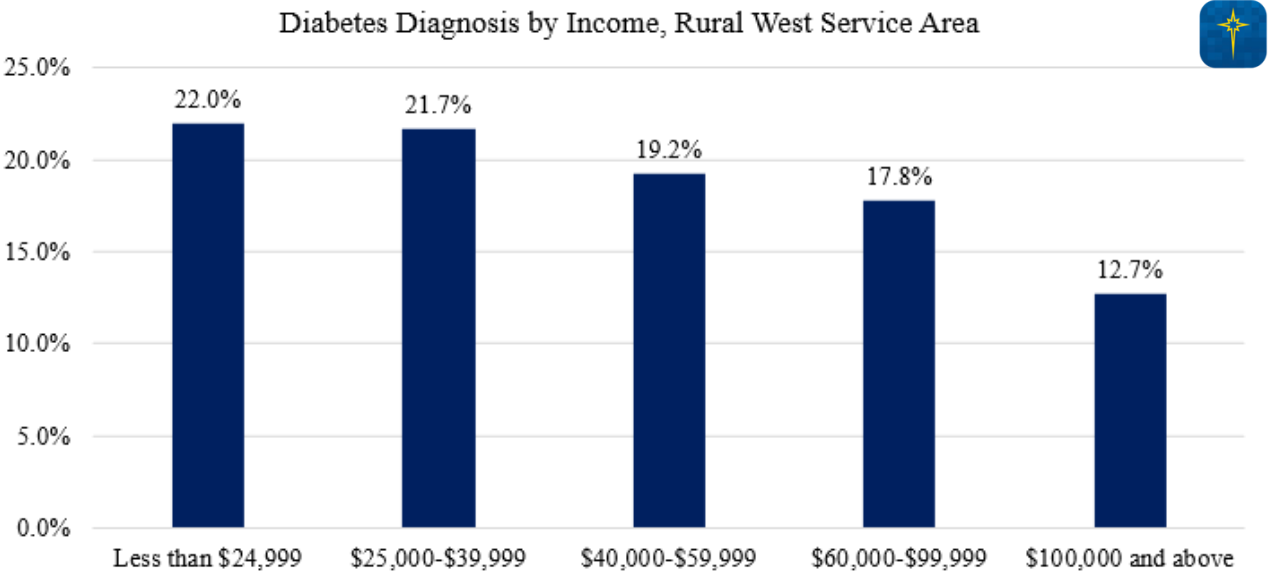
Diagnosis... Diabetes ...

According to the 2023 CDC National Diabetes Statistics Report, an estimated 38 million Americans have diabetes, with 90-95% of all diagnoses classified as type 2 diabetes. Approximately 98 million Americans have prediabetes, and more than 8 in 10 adults with prediabetes don't know they have it, which is more than 78 million individuals across the country. Of U.S. adults diagnosed with diabetes, 89.0% were either overweight or obese. The total medical cost, lost work and wages for people with diagnosed diabetes is $413 billion dollars annually, with medical costs for people with diabetes twice as high as for people without diabetes. Type 2 diabetes, once called adult-onset diabetes, because it was previously a rare diagnosis in youth, has increased significantly in ages 10-19 since 2002. In 2016, diabetes was responsible for 16 million ER visits and 7.8 million hospital discharges nationally. According to the Pennsylvania Vital Statistics report (2021), there were 4,710 diabetes related deaths making it the 6th leading cause of deaths in Pennsylvania.

The CDC's National Diabetes Statistics Report (2023) showed disparities in diabetes exist among racial and ethnic groups, with 13.6% of American Indian/ Alaska Natives are diagnosed with diabetes— the highest rate among any racial or ethnic group, followed by 12.5% of non-Hispanics Black adults and 11.3% of adults of Hispanic origin. Asians and White non-Hispanics have the lowest prevalence of diabetes at 7.8% and 6.1% respectively. These disparities also exist on an educational level: those with less than a high school education have a diabetes prevalence of 14.8%, while those with more than high school education have a diabetes prevalence of 6.1%. Carbon County has 9.5% of adults with diabetes and Schuylkill County has 10% of adults with diabetes.

In the Rural West service area, 19.0% of respondents reported having been diagnosed with diabetes. These responses are higher than averages seen by the CDC at the county level.

| Age Adjusted Prevalence of Diagnosed, Undiagnosed, and Total Diabetes Among Adults 18 years and older, United States (CDC) 2019-2021			
Characteristic	Total Percentage	Men Percentage	Women Percentage
Race and Ethnicity			
American Indian or Alaska Native	13.60%	13.40%	13.70%
Asian, non-Hispanic	9.10%	10.60%	7.80%
Black, non-Hispanic	12.10%	11.50%	12.50%
Hispanic	11.70%	12.20%	11.30%
White, non-Hispanic	6.90%	7.70%	6.10%
Education			
Less than high school	13.10%	12.70%	14.80%
High school	9.10%	9.60%	8.70%
More than high school	6.90%	7.90%	6.10%
Family income to poverty ratio			
Less than 100% FPL	13.10%	12.20%	13.60%
100–299% FPL	10.30%	11.00%	6.70%
300–499% FPL	7.70%	8.80%	6.70%
500% FPL or more	5.10%	6.30%	3.90%
Metropolitan residence			
Metropolitan	8.10%	8.70%	7.60%
Nonmetropolitan	9.50%	10.50%	8.60%

From our previous question of chronic disease presence, we know that 19.0% of respondents in the Rural West service area have diabetes. Our survey also looks at the relationship between diabetes and income as it can give more insight into the contributing factors to incidence rates. In the Rural West service area, the less than $24,999 income bracket had the highest rate of diabetes (22.0%), followed by the $25,000-$39,999 income bracket (21.7%), and the $100,000 and above bracket has the lowest (12.7%).

Diabetes Diagnosis by Income, Rural West Service Area

Income Bracket	Percentage
Less than $24,999	22.0%
$25,000-$39,999	21.7%
$40,000-$59,999	19.2%
$60,000-$99,999	17.8%
$100,000 and above	12.7%

Hypertension

The Center for Disease Control (CDC) defines hypertension as having a blood pressure that is at or above a systolic value of 130 mm Hg, which measures the pressure in your arteries when your heart beats, and a diastolic value of 80 mm Hg, which measures the pressure in your arteries when your heart rests between beats. While your blood pressure changes throughout the day based on your activities, having blood pressure consistently above normal can result in a hypertension diagnosis. A normal blood pressure is less than 120/80 mmHg. Data regarding hypertension also includes individuals who are taking medications for hypertension that would otherwise be uncontrolled. According to the CDC (2023), nearly half of adults have high blood pressure with a prevalence of 48.1% (119.9 million). These numbers are even more alarming because they are likely underreported. The CDC estimates that one in five adults with high blood pressure do not know they have this condition. Poorly controlled hypertension is a serious condition that can affect many bodily systems over time including the heart, kidneys, vision, and blood vessels. According to the American Heart Association, hypertension can increase risk for heart attack, stroke, and kidney failure among other complications. Due to the serious impacts it can have on health, hypertension contributes to an increased burden on our healthcare system, with hypertension accounting for 1.3 million emergency department visits each year in the United States and was a primary or contributing cause to 685,875 deaths in 2022.

The Pennsylvania hypertension rate is 30%, with a slightly lower rate in Carbon County (29.4%) Schuylkill County (29.8%). In the Rural West service area, 44.3% of CHNA survey respondents have been diagnosed with high blood pressure. When looking at hypertension by income, 34.1% of people earning less than $25,000 per year reported having hypertension, 31.4% of respondents earning $25,000-$59,999 reported having hypertension, and 36.5% of respondents with an income of $60,000 or more. While there are disparities in diagnosis by income, it is important to note that all income categories are high.

BRFSS Reported Hypertension Rates in Service Area Counties
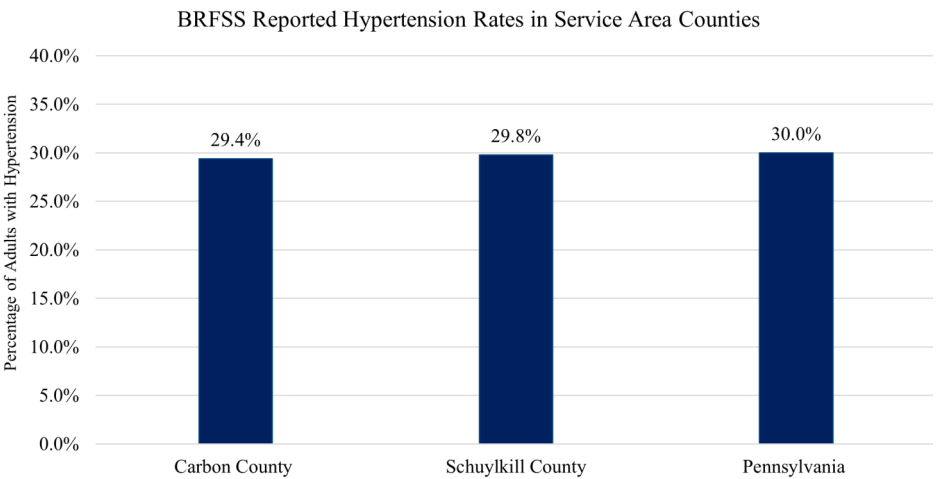
Hyperlipidemia

Hyperlipidemia, or high cholesterol, is defined as a total serum cholesterol at or above 240 mg/dL, which stands for milligrams per deciliter and is a unit of measure that shows the concentration of a substance in a fluid. Data regarding hyperlipidemia also includes individuals who are taking medications to control their high cholesterol. According to the 2023 report from the American Heart Association, 26.7% of U.S. adults aged 20 and over have been diagnosed with hyperlipidemia; more than 1 in 4 U.S. adults. This has been steadily increasing in most recent decades, with one in five U.S. adults having hyperlipidemia in the 1995 CDC report. High cholesterol can lead to plaque buildup in one's blood vessels, which can lead to increased risk of carotid artery disease, coronary heart disease, heart attack and stroke among other complications. In addition to adults, 7.4% of all U.S. children and adolescents have high total cholesterol. The risk of high total cholesterol significantly increases with a risk factor of obesity, and 6.3% of children 6-19 years old have high cholesterol at a healthy weight compared to 11.6% at a weight that is considered obese.

The Pennsylvania hyperlipemia rate is 35%, with a lower rate in Carbon County (28.4%) and Schuylkill County (29.1%), with CHNA data indicating age-related diagnoses.

High Cholesterol by Age, Rural West Service Area
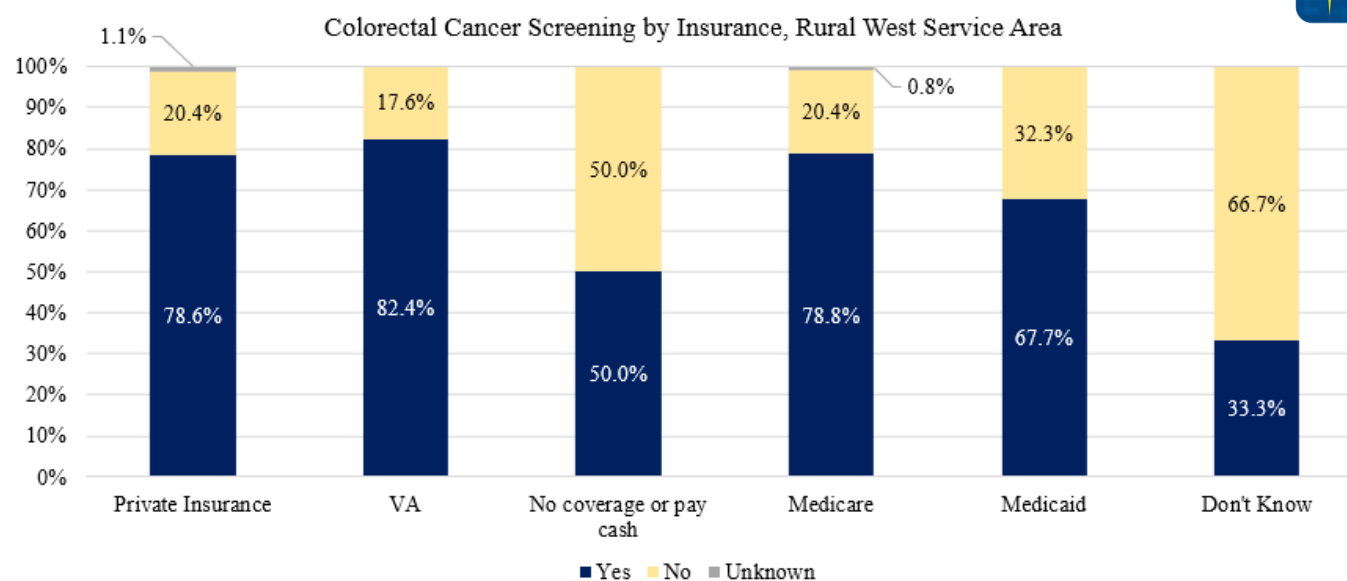
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Rural West Service Area
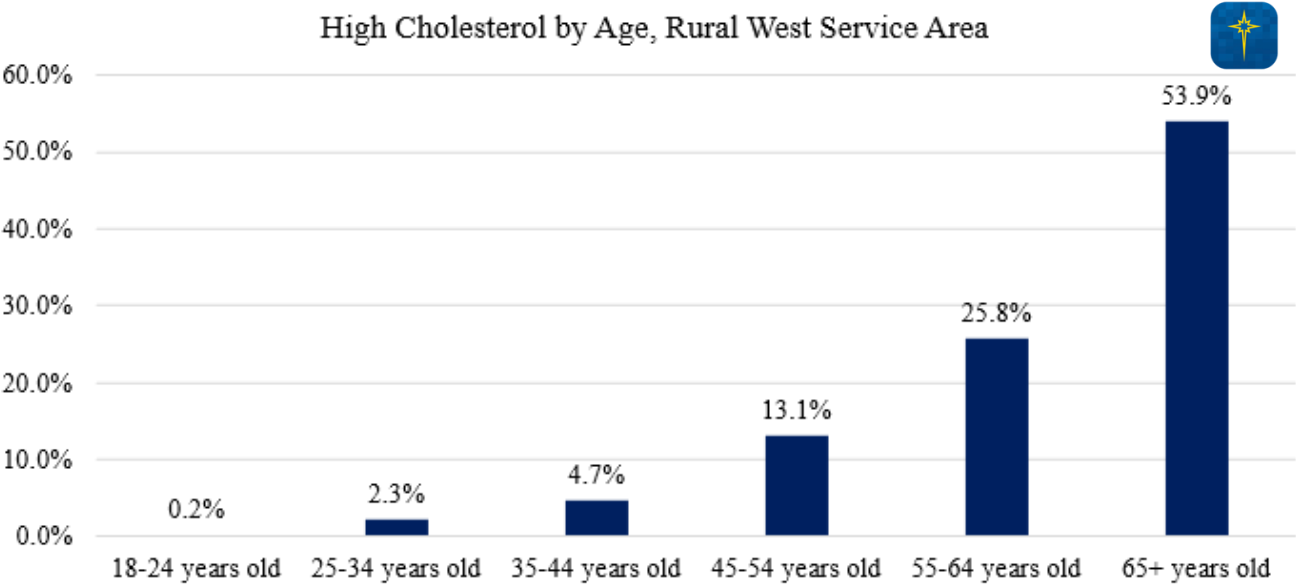
The CDC reported that 1.7 million people in the U.S. are diagnosed with cancer each year and the estimated health care cost of cancer (e.g., diagnosis, care, treatment) is expected to reach more than $240 billion by 2030. Cancer is the 2nd leading cause of death nationally with over half a million deaths each year. According to the National Cancer Institute, cancer incidence in the U.S. is 458.3 per 100,000. Pennsylvania has a cancer incidence of 415.1 per 100,000. There are certain risk factors that increase the risk of getting cancer, including obesity, smoking, secondhand smoke exposure, exposure to sun and tanning beds, excessive alcohol use, and some infectious diseases. These health behaviors have been discussed in earlier sections of this document.

In addition to certain health behaviors, access to care can play a significant role in cancer screening, diagnosis, and mortality rates. Early vs. late-stage detection can impact cancer mortality, and we observe that uninsured patients and Medicaid recipients have a much lower rate of early detection than their privately insured counterparts.

The National Cancer Institute (NCI) showed that, for many cancers, Black men and women have higher mortality rates. For example, the American Cancer Society shows that Black women have a 40% higher chance of mortality from breast cancer than White women despite comparable levels of incidence. Black men are twice as likely to die of prostate cancer than White men and continually have the highest prostate cancer mortality rates among US racial and ethnic groups.

Educational attainment, regardless of race or ethnicity, also appears to play a role in cancer mortality for certain cancers. In order to be considered up to date with screenings for this analysis, respondents must have had a screening date fall in the recommended time frame for their screening type and age. If a respondent was missing an answer to one of the questions, their screening status was marked "Unknown." Our survey asked respondents to indicate their most recent colorectal cancer screening. Of respondents in the Rural West service area, 76.6% have been screened, 22.5% have not been screened, and 0.9% do not know.

The CHNA survey also assesses colorectal cancer screening by insurance type to uncover any disparities and identify if insurance is a barrier to cancer screenings. Half (50.0%) of respondents in the Rural West service area ages 50-74 who do not have insurance have never been screened for colorectal cancer, 32.3% with Medicaid, and 66.7% who do not know their insurance type. This is different than respondents with private insurance (20.4%) and Medicare (20.4%). Since colon cancer can be prevented or caught early with screenings, this is a large gap in care.

Colorectal Cancer Screening by Insurance, Rural West Service Area

Insurance	Yes	No	Unknown
Private Insurance	78.6%	20.4%	1.1%
VA	82.4%	17.6%	
No coverage or pay cash	50.0%	50.0%	
Medicare	78.8%	20.4%	0.8%
Medicaid	67.7%	32.3%	
Don't Know	33.3%	66.7%	

Rural West Service Area

The CHNA survey also asks respondents about breast cancer screening in the last two years (i.e., routine mammogram) and compares breast cancer screenings by insurance. In the Rural West service area, 71.2% of female respondents ages 40-74 years old had a mammogram, 18.3% have not, 0.5% do not know, and for 9.8% of respondents it was not applicable.

When looking at breast cancer screening by insurance type, 74.4% of respondents with private insurance had a mammogram in the last two years, compared to 71.8% of respondents with Medicare, 57.7% with Medicaid, 62.5% of respondents that didn't know their insurance type, and 75.0% of respondents who have no insurance or pay cash.

While a significant portion of respondents aged 40-74 have undergone mammograms, the data reveals notable differences based on insurance type. Those with Medicare show the highest screening rates, followed by those with private insurance, and lastly, those with Medicaid. These findings underscore the need for targeted interventions to improve breast cancer screening accessibility and uptake, particularly among Medicaid recipients.

Mammogram Screening by Insurance type, Rural West Service Area
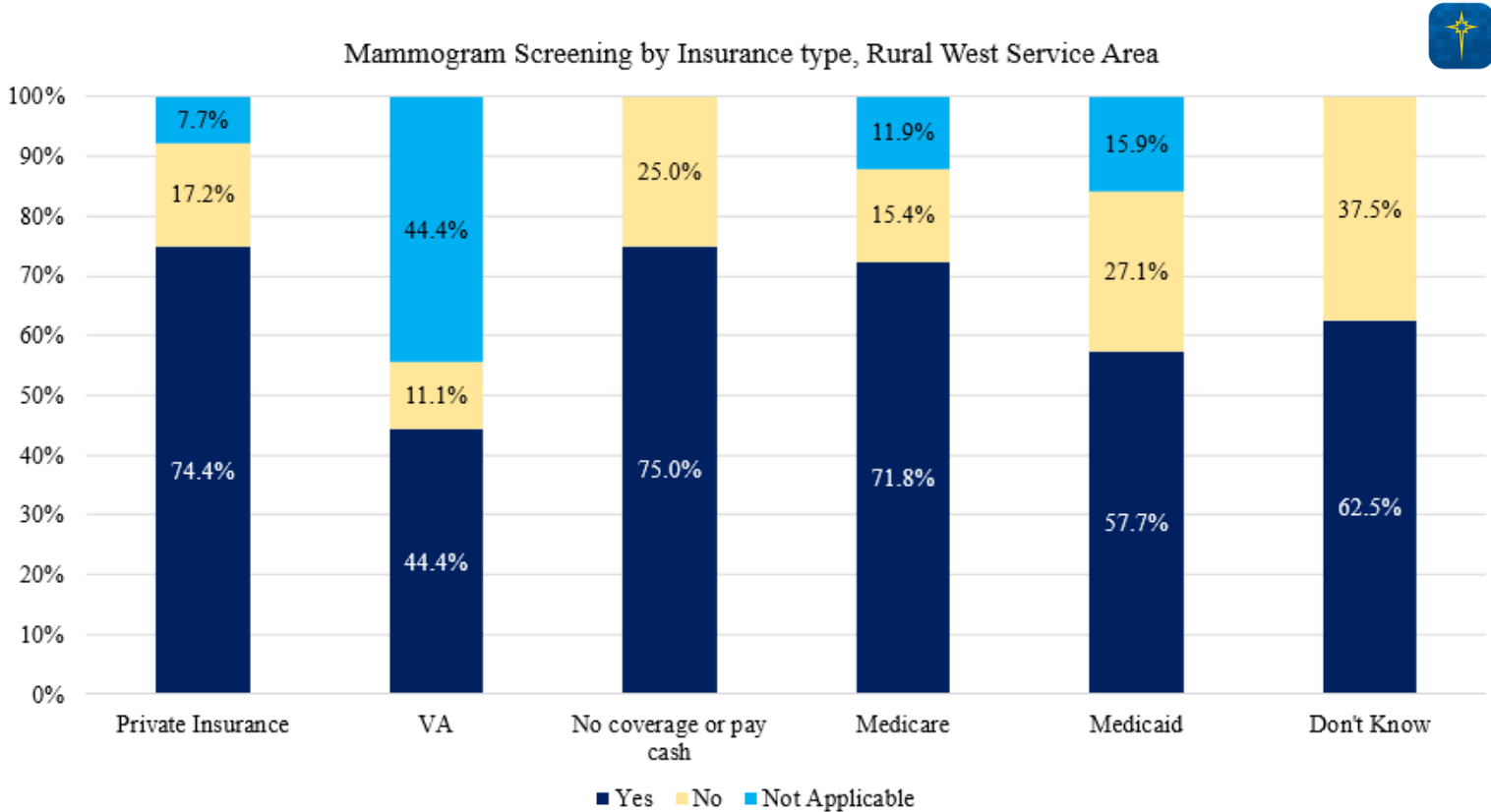
According to the National Vital Statistics System, in 2022, the United States had 68.1 unintentional injury deaths per 100,000 population, which was the third ranked cause of death. In 2021, there were 25.5 million visits to the emergency room for unintentional injuries. Unintentional injuries are unplanned and preventable when using proper safety precautions; they are also a substantial contributor to premature death. When broken down further for the United States, there were 14 per 100,000 population unintentional fall deaths, 13.4 per 100,000 population motor vehicle traffic deaths, and 30.9 per 100,000 population unintentional poisoning deaths. In Pennsylvania, there were 77.5 unintentional deaths per 100,000. Carbon County has 139.2 unintentional deaths per 100,000 and Schuylkill County has 42.65 unintentional deaths per 100,000. Since unintentional injury deaths are so prominent, Healthy People 2030 has set objectives for injury deaths, some of which are to reduce unintentional injury deaths, reduce deaths involving opioids, reduce emergency department visits for non-fatal injuries and unintentional injuries.

Unintentional Injury Deaths 2022 via CDC Wonder	
Region	Rate per 100,000 population
Berks	64.00
Bucks	57.65
Carbon	139.2
Lehigh	72.47
Monroe	69.83
Montgomery	42.38
Northampton	60.79
Schuylkill	48.65
Luzerne	102.48
Warren (NJ)	59.75
Hunterdon (NJ)	45.6
PA	70.56
NJ	49.67
US	64.03

Conclusion

Through this extensive review of the primary and secondary data, it is evident that there are significant needs to address within our communities. For the upcoming three-year (2025-2028) cycle, St. Luke's University Health Network will continue to work toward addressing the health priorities identified network-wide to improve the community's overall health and well-being. The three main priorities identified include: access to care; preventing chronic disease; and improving mental and behavioral health.

To analyze our findings in these areas, SLUHN has adopted the Healthy People 2030 framework, including goals and objectives The social determinants of health shape the status of a person's health and provide guidance for community health priorities. When addressing the priority health needs, it is crucial to consider the social determinants of health and lifestyle behaviors to effectively tackle the service area's health disparities. Some significant survey findings, which are consistent with trends seen widely, are related to health outcomes and income, access to care for minority and marginalized populations, healthy eating (i.e., fruit and vegetable consumption), diabetes and other chronic illnesses, the opioid epidemic, and other substance use.

From our analysis of primary and secondary data, as well as the key CHNA informant interviews and work with our community members, we see significant issues facing our communities that impede healthy lifestyles. Our efforts in prevention, care transformation, and research and partnerships help support our work to promote sustainable programs and opportunities for our reach to focus on a wide range of health promotion and quality of life initiatives.

While there are many that need to be addressed, the results from the 2025 CHNA found the most pressing needs to be specifically in areas related to:

- Access to Care
- Workforce Development
- Food Security
- Obesity Reduction
- Physical Activity Promotion
- Opioids and other Substance Use
- Mental Health
- Housing
- Transportation

Social Determinants of Health

Education Access and Quality

Health Care Access and Quality

Economic Stability

Neighborhood and Built Environment

Social and Community Context

The needs discussed within the health categories outlined in this document will serve as our guide in creating a detailed campus-specific implementation plan to best address the specific needs of the St. Luke's Network service area using the three pillars of: wellness and prevention; care transformation; and research and partnerships. We will work collaboratively in partnership with our community and network partners to create a more equitable society with better health outcomes, especially among our most vulnerable populations.

Appendix A

2024 CHNA Key Informant Interview

St. Luke's University Health Network (SLUHN) is a nationally recognized non-profit health network that has facilities serving counties in both Pennsylvania (Lehigh, Northampton, Carbon, Schuylkill, Bucks, Berks, Monroe, Luzerne) and New Jersey (Warren and Hunterdon). As part of the Patient Protection and Affordable Care Act, all non-profit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years. In order to accomplish our goals, St. Luke's is conducting key informant interviews to identify health needs within the community. Since you are a vital member of our community, you are being asked for your feedback to assist us in data collection. Your answers will be compiled by St. Luke's to determine health needs in the community.

Please note that your name will not be associated with your responses.

1. Name:
2. Title:
3. Organization:
4. How long have you been a part of this community and in what capacities?
5. When thinking about others you interact with here, do you feel a sense of community?
6. How would you describe your community?
7. What are the major needs/challenges within this community?
8. What are some of the challenges specific to your organization?
9. How do you feel this community has been successful in meeting its needs?
10. What improvements in policy and community infrastructure would assist you in meeting community needs?
11. Who are some of the key players in your community and what organization do they belong to?
12. What are some of the strengths and resources of your community?
13. Do you feel these strengths are shared and evenly distributed throughout the community? Please explain.
14. What are some concrete examples of strengths and challenges across the lifespan related to the following topics in your community?
    1. Health disparities/Access to care (example: access to medical, mental, dental and vision care)
    2. Chronic Disease (example: diabetes, heart disease, physical activity, diet, and cancer)
    3. Mental/Behavioral Health (example: substance misuse/use disorder, depression, and anxiety)
15. What are the **top three issues** that need to be addressed in your community?
16. Any additional comments?

Appendix B

2024 CHNA Community Forum Invited Organizations- St. Luke's Lehighton, Carbon, and Miners Campuses

- Attorney General's Office/LETI program
- Carbon Children and Youth
- Carbon County Area of Agency on Aging
- Carbon County Area of Agency on Aging
- Carbon County Commissioners
- Carbon County Commissioners
- Carbon County Commissioners
- Carbon County Community Foundation
- Carbon County Community Foundation
- Carbon County - Jim Thorpe
- Carbon County Systems of Care
- Carbon Mental Health Developmental Services
- Carbon Monroe Pike Drug and Alcohol
- Carbon Monroe Pike Drug and Alcohol Director
- Carbon Veterans Affairs
- Carbon/Luzerne/Wyoming/Lackawanna
- CCTI

- Children and Youth
- Family Promise
- Family Promise
- Greater Lehigh Valley United Way
- Hope and Coffee
- Jim Thorpe School District
- LANTA
- LCCC SHINE
- Lehighton
- Lehighton Area School District
- Lehighton School District
- Lehigh Carbon Community College – Tamaqua
- Lehigh Valley Childcare Centers
- LVCC
- Matrix Behavior Solutions
- Matrix Behavior Solutions
- New Roots

Rural West Service Area

- PA East Central AHEC

- Palmerton School District

- Panther Valley Community Center/Food Pantry

- Panther Valley School District

- Pathstone Head Start

- Pocono Counties Workforce Development

- RCORP Steering Committee

- Schuylkill Drug and Alcohol

- Schuylkill United Way

- Second Harvest Food Bank

- SHARE Housing - Carbon

- Tamaqua Area Community Partnership

- Tamaqua Area School District

- Tamaqua Primitive Methodist Church/Food Pantry

- Weatherly School District

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