

## 2022 Community Health Needs Assessment





# Table of Contents

<b>OUR COMMITMENT TO COMMUNITY HEALTH</b> .....	<b>2</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>3</b>
CHNA LEADERSHIP .....	3
METHODOLOGY AND COMMUNITY ENGAGEMENT .....	3
COMMUNITY HEALTH PRIORITIES .....	4
BOARD APPROVAL .....	4
<b>ENDLESS MOUNTAINS HEALTH SYSTEMS SERVICE AREA</b> .....	<b>5</b>
<b>SOCIAL DETERMINANTS OF HEALTH</b> .....	<b>6</b>
<b>PRIORITY HEALTH NEEDS</b> .....	<b>12</b>
<b>COVID-19 IMPACT ON COMMUNITIES</b> .....	<b>16</b>
<b>SERVICE AREA POPULATION TRENDS</b> .....	<b>18</b>
<b>HEALTH STATISTICS</b> .....	<b>24</b>
ACCESS TO HEALTHCARE .....	24
HEALTH RISK FACTORS AND CHRONIC DISEASE .....	27
AGING POPULATION .....	33
MENTAL HEALTH AND SUBSTANCE USE DISORDER .....	35
YOUTH HEALTH .....	38
MATERNAL AND INFANT HEALTH .....	41
<b>KEY STAKEHOLDER SURVEY RESULTS</b> .....	<b>45</b>
<b>EVALUATION OF IMPACT FROM 2019 CHNA IMPLEMENTATION PLAN</b> .....	<b>54</b>
<b>2022-2025 COMMUNITY HEALTH IMPROVEMENT PLAN</b> .....	<b>57</b>
<b>APPENDIX A: SECONDARY DATA REFERENCES</b> .....	<b>59</b>
<b>APPENDIX B: KEY STAKEHOLDER SURVEY PARTICIPANTS</b> .....	<b>61</b>



## Our Commitment to Community Health

Endless Mountains Health Systems (EMHS) is a not-for-profit Critical Access Hospital, primarily serving the residents of Susquehanna County, Pennsylvania. The hospital is licensed for 25 beds and offers a short procedure unit, emergency services, and various ancillary services. The system maintains physician offices, including various specialties on site, and has established a vast referral source for additional off-site specialties. The hospital has an annual average of 1,000 admissions, 42,000 office visits, and 7,500 emergency visits.

The future of EMHS is geared toward prevention, education, and quality with continued development as a health resource. In March 2019, EMHS joined other rural hospitals as a participating partner in the Pennsylvania Rural Health Model in collaboration with the Centers for Medicare and Medicaid Innovation. The model aims to increase rural Pennsylvanians' access to high-quality care and improve their health, while also reducing the growth of hospital expenditures across payers, including Medicare, and improving the financial viability of rural Pennsylvania hospitals. As a partner in the Rural Health Model, EMHS will be better positioned to meet the community's health needs.

### **Endless Mountains Health Systems Mission:**

*Endless Mountains Health Systems is committed to the operation and development of a health system that will provide optimum care within the scope of its abilities. The key elements in the EMHS process are quality, service, safety, cost, flexibility, and access.*

Every three years, EMHS conducts a Community Health Needs Assessment (CHNA) to better understand and respond to the health and wellness concerns for our community. The 2022 CHNA builds upon previous assessments and will continue to guide our community benefit and community health improvement efforts. Consistent with previous assessments, the 2022 CHNA focused on the health needs of all residents of Susquehanna County.

We invite our community partners to learn more about the CHNA and opportunities for collaboration to address identified health needs. Please visit our website at: [endlesscare.org](https://endlesscare.org).



# 2022 CHNA Executive Summary

## CHNA Leadership

The 2022 CHNA was overseen by a planning committee of representatives of EMHS, with feedback from key community stakeholders. These individuals served as liaisons to the hospital and the communities it serves.

### CHNA Planning Committee

Loren Stone, MHA, FACHE, Chief Executive Officer

Tanya Oleniacz, Accountant

## Our Research Partner

Endless Mountains Health Systems contracted with Community Research Consulting (CRC) to conduct the CHNA. CRC is a woman-owned business that specializes in conducting stakeholder research to illuminate disparities and underlying inequities and transform data into practical and impactful strategies to advance health and social equity. Our interdisciplinary team of researchers and planners have worked with hundreds of health and human service providers and their partners to reimagine policies and achieve measurable impact. Learn more about our work at [buildcommunity.com](https://buildcommunity.com).



## Methodology and Community Engagement

The 2022 CHNA included quantitative research methods and community conversations to determine health trends and disparities affecting Susquehanna County residents. Through a comprehensive view of statistical health indicators and community stakeholder feedback, a profile of priority areas was determined. The findings will guide healthcare services and health improvement efforts, as well as serve as a community resource for grant making, advocacy, and to support the many programs provided by health and social service partners.

Community engagement was an integral part of the 2022 CHNA. In assessing community health needs, input was solicited and received from persons who represent the broad interests of the community, as well as underserved, low-income, and minority populations. These individuals provided wide perspectives on health trends, expertise about existing community resources available to meet those needs, and insights into service delivery gaps that contribute to health disparities and inequities.

The following research methods were used to determine community health needs:

- ▶ An analysis of existing secondary data sources, including public health statistics, demographic and social measures, and healthcare utilization
- ▶ An online Key Stakeholder Survey with community representatives to solicit information about local health needs and opportunities for improvement
- ▶ Conversations with EMHS leaders to align community health planning with population health management strategies, including the Pennsylvania Rural Health Model



## **Community Health Priorities**

To work toward health equity, it is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within the community. Priorities were determined by the EMHS CHNA Planning Committee, taking into consideration research findings and feedback from community stakeholders.

Using feedback from community partners and stakeholders and taking into account the hospital's expertise and resources, EMHS will focus efforts on the following community health priorities as part of its 2022-2025 Community Health Improvement Plan:

- ▶ Obesity and Diabetes
- ▶ Mental Well-Being

## **Board Approval**

The 2022 CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements to conduct a CHNA and develop a corresponding Community Health Improvement Plan (CHIP) every three years as set forth by the Affordable Care Act (ACA). The research findings and plan will be used to guide community benefit initiatives for EMHS and engage local partners to collectively address identified health needs.

Endless Mountains Health Systems is committed to advancing initiatives and community collaboration to support the issues identified through the CHNA. The 2022 CHNA report and CHIP were presented to the EMHS Board of Directors and approved in December 2022.

Following the Board's approval, the CHNA report and CHIP were made available to the public via the hospital's website at [endlesscare.org](https://endlesscare.org).





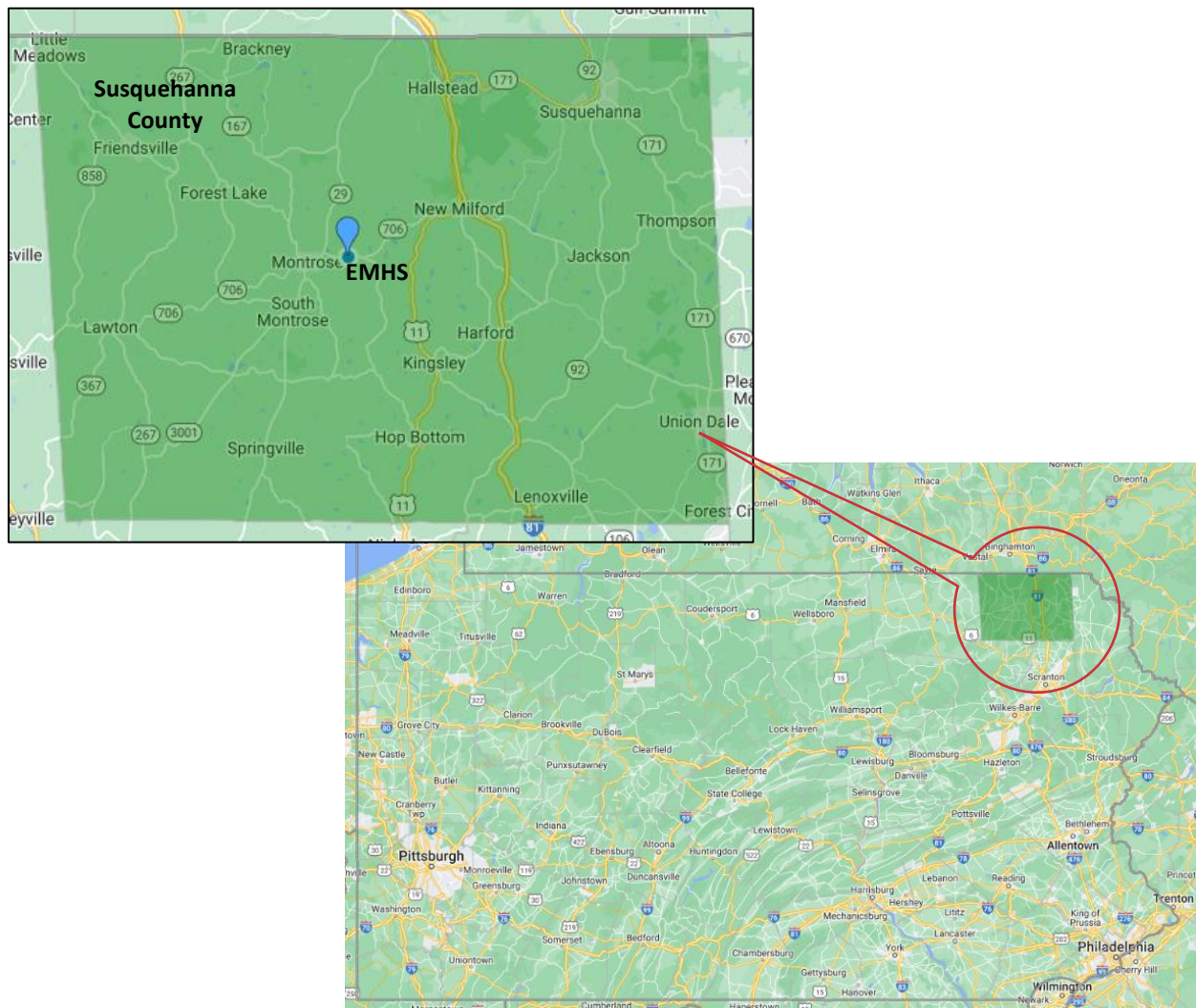
# Endless Mountains Health Systems Service Area Description

Endless Mountains Health Systems is a not-for-profit entity located in Montrose, Pennsylvania. The hospital primarily serves residents of Susquehanna County, shown in the map below.

Susquehanna County is located at the top of the Endless Mountains in Northeastern Pennsylvania, along the I-81 corridor. Susquehanna County is situated between Binghamton, NY and the Wilkes-Barre-Scranton metropolitan regions. More than 40% of the U.S. population and its purchasing power, and more than 60% of Canada's population is located within 500 miles of Susquehanna County.

Susquehanna County was created on February 21, 1810, from part of Luzerne County, and later organized in 1812. It is named for the Susquehanna River. Today, Susquehanna County is known for its rich natural resources and recreation opportunities.

**Endless Mountains Health System Service Area**



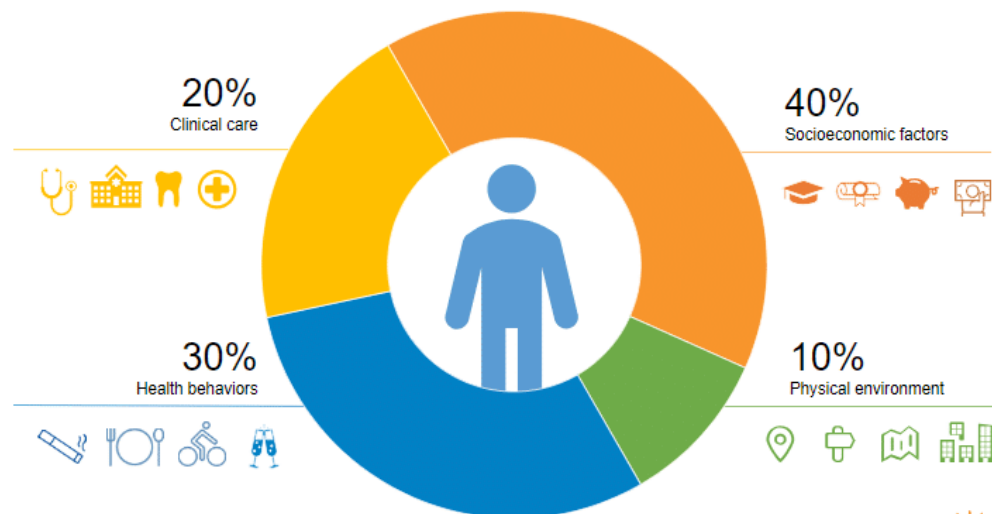


# Social Determinants of Health: The connection between our communities and our health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health risks and outcomes. Healthy People 2030, the CDC’s national benchmark for health, recognizes SDoH as central to its framework, naming “social and physical environments that promote good health for all” as one of the four overarching goals for the decade. Healthy People 2030 outlines five key areas of SDoH: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context.

The mix of ingredients that influence each person’s overall health profile include individual behaviors, clinical care, environmental factors, and social circumstance. While health improvement efforts have historically targeted health behaviors and clinical care, public health agencies, including the US Centers for Disease Control and Prevention (CDC), widely hold that at least **50% of a person’s health profile is determined by SDoH**.

## WHAT MAKES US HEALTHY?



© Interactive Health All Rights Reserved

Source: Centers for Disease Control



Addressing SDoH is a primary approach to achieving *health equity*. Health equity encompasses a wide range of social, economic, and health measures but can be simply defined as “a fair opportunity for every person to be as healthy as possible.” In order to achieve health equity, we need to look beyond the healthcare system to dismantle systematic inequities born through racism and discrimination like power and wealth distribution, education attainment, job opportunities, housing, and safe environments, to build a healthier community for all people now and in the future.

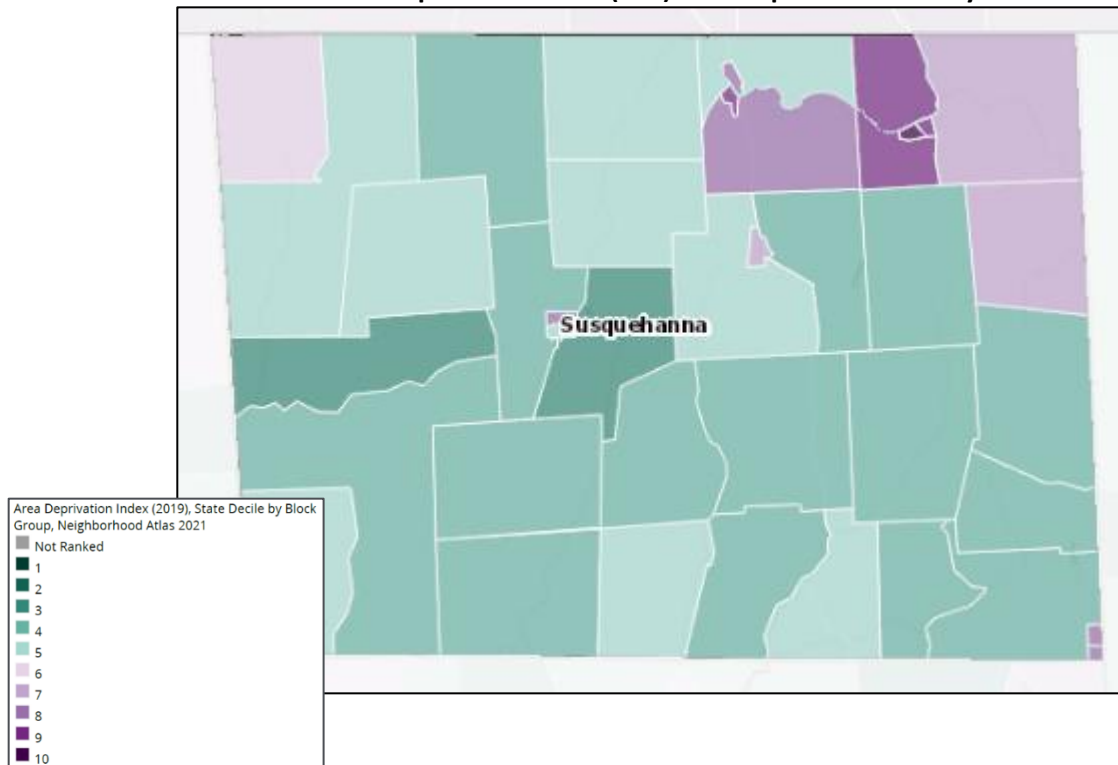


## Understanding Health Equity

A host of indexes are available to illustrate the potential for health disparities and inequities at the community-level based on SDoH. A description of each index is provided below followed by data visualizations of each tool that show how well Susquehanna County fares compared to state and national benchmarks.

- ▶ **Area Deprivation Index (ADI):** The ADI provides a census block group measure of socioeconomic disadvantage based on income, education, employment, and housing quality. ADI scores are displayed on a scale from 1 (least disadvantaged) to 10 (most disadvantaged). A block group is a subdivision of a census tract and typically contains between 250 and 550 housing units.
- ▶ **Community Need Index (CNI):** The CNI is a zip code-based index of community socioeconomic need calculated nationwide. The CNI scores zip codes on a scale of 1.0 to 5.0, with 1.0 indicating a zip code with the least need and 5.0 indicating a zip code with the most need compared to the US national average of 3.0. The CNI weights, indexes, and scores zip codes by socioeconomic barriers, including income, culture, education, insurance, and housing.
- ▶ **Racial Disparities and Disproportionality Index (RDDI):** The RDDI was developed by the Corporation for Supportive Housing (CSH) to measure whether a racial and/or ethnic group's representation in a particular public system is proportionate to their representation in the overall population. The index can be viewed as the likelihood of one group experiencing an event, compared to the likelihood of another group experiencing that same event.

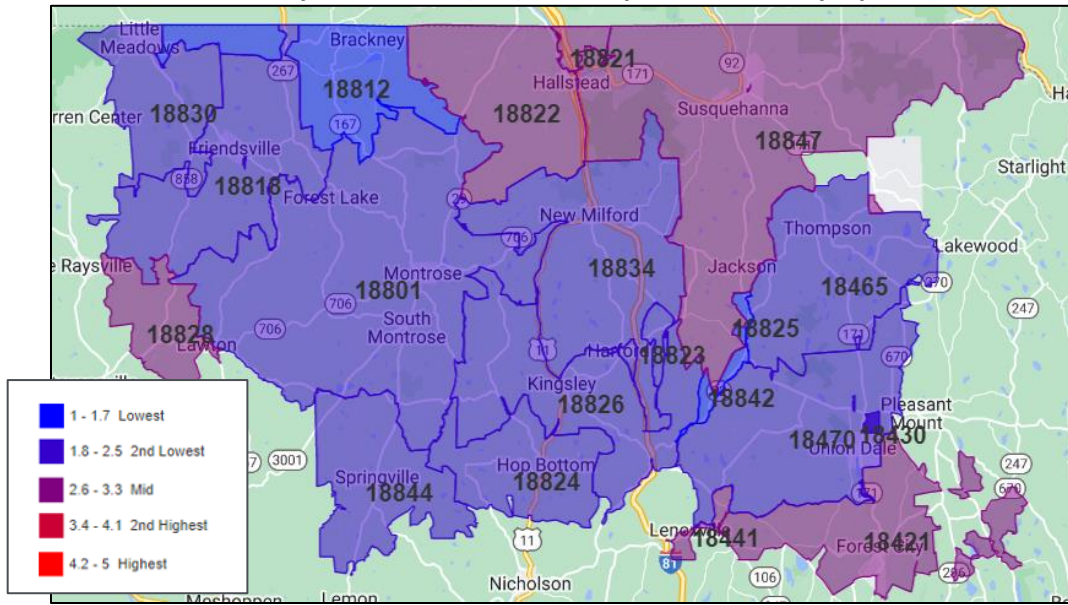
**Area Deprivation Index (ADI) for Susquehanna County**







### Community Need Index (CNI) for Susquehanna County Zip Codes



Zip Code	Town	CNI Score	Zip Code	Town	CNI Score
18812	Brackney	1.2	18842	South Gibson	1.4
18825	Jackson	1.4			
18818	Friendsville	1.8	18430	Herrick Center	2.2
18830	Little Meadows	1.8	18465	Thompson	2.2
18844	Springville	1.8	18801	Montrose	2.2
18470	Union Dale	2.0	18823	Harford	2.2
18824	Hop Bottom	2.0	18834	New Milford	2.2
18826	Kingsley	2.0			
18421	Forest City	2.6	18441	Lenoxville	3.0
18847	Susquehanna	2.6	18821	Great Bend	3.2
18828	Lawton	2.8	18822	Hallstead	3.2

**Susquehanna County has an average CNI score of 2.3, indicating lower community socioeconomic need overall.** No zip codes comprising the county score in higher socioeconomic need categories. Great Bend zip code 18821 and Hallstead zip code 18822, located in the north central portion of the county, have the highest CNI scores of 3.2 out of a maximum of 5.0, largely due to higher concentrations of poverty.

It is worth noting that Susquehanna zip code 18847 has a lower CNI score of 2.6, but pockets of disparity predominantly in the northern portion of the zip code, as indicated by ADI findings. Areas near Susquehanna Depot have maximum ADI scores of 9-10. Similarly, Montrose zip code 18801 has a low CNI score of 2.2, but pockets of disparity, largely within the downtown portion of the zip code.

While racial and ethnic diversity is increasing across Susquehanna County, nearly 94% of the population identifies as White. This finding is generally consistent across individual zip codes. The county is home to an older population with 23.5% of residents aged 65 or over. Approximately 30% or more of residents in Lenoxville, Hop Bottom, Little Meadows, and Jackson are aged 65 or over.



### 2016-2020 Susquehanna County Social Determinants of Health by Zip Code

Zip Code	Population in Poverty	Children in Poverty	No High School Diploma	No Health Insurance	CNI Score
18821, Great Bend	15.5%	23.5%	11.5%	5.2%	3.2
18822, Hallstead	17.1%	26.4%	12.6%	6.0%	3.2
18441, Lenoxville	2.1%	0.0%	17.8%	5.5%	3.0
18828, Lawton	12.5%	37.5%	17.1%	6.2%	2.8
18847, Susquehanna	14.6%	16.9%	10.3%	5.6%	2.6
18421, Forest City	9.1%	13.3%	3.3%	5.1%	2.6
18465, Thompson	14.8%	20.8%	10.5%	7.7%	2.2
18801, Montrose	11.1%	20.1%	9.0%	6.7%	2.2
18823, Harford	6.2%	28.6%	4.7%	6.2%	2.2
18834, New Milford	12.0%	19.5%	11.0%	6.1%	2.2
18470, Union Dale	10.8%	12.7%	3.7%	2.4%	2.0
18824, Hop Bottom	15.5%	15.0%	11.3%	4.6%	2.0
18826, Kingsley	10.1%	24.2%	10.0%	6.8%	2.0
18818, Friendsville	6.7%	5.1%	6.7%	9.2%	1.8
18830, Little Meadows	10.0%	15.6%	11.0%	6.9%	1.8
18844, Springville	8.5%	8.2%	8.5%	4.8%	1.8
18825, Jackson	2.9%	0.0%	0.0%	14.5%	1.4
18842, South Gibson	8.7%	0.0%	1.9%	7.7%	1.4
18812, Brackney	5.1%	6.4%	6.4%	7.0%	1.2
Pennsylvania	12.0%	16.7%	9.0%	5.6%	NA

Source: US Census Bureau, American Community Survey

### 2016-2020 Susquehanna County Zip Code Population (Pop.) Trends

Zip Code	Total Pop.	Under Age 18	65 Years or Older	White	Black or African American	Two or More Races	Latinx origin (any race)
18821, Great Bend	1,203	21.3%	23.5%	94.6%	1.5%	1.0%	0.9%
18822, Hallstead	3,096	19.5%	22.5%	98.9%	0.1%	0.9%	0.2%
18441, Lenoxville	385	4.2%	30.6%	100.0%	0.0%	0.0%	0.0%
18828, Lawton	337	19.0%	12.5%	96.7%	0.0%	3.3%	0.0%
18847, Susquehanna	6,011	24.4%	20.6%	98.3%	0.3%	0.8%	0.5%
18421, Forest City	4,289	17.6%	22.3%	95.3%	1.8%	2.0%	2.4%
18465, Thompson	1,208	17.5%	23.9%	97.9%	1.1%	0.8%	3.6%
18801, Montrose	8,254	19.0%	22.8%	96.4%	0.4%	2.0%	3.3%
18823, Harford	194	7.2%	22.2%	98.5%	0.0%	0.0%	1.5%
18834, New Milford	3,508	19.8%	21.4%	98.3%	0.3%	1.1%	2.1%
18470, Union Dale	1,976	13.9%	24.2%	97.0%	0.0%	2.1%	3.4%
18824, Hop Bottom	1,487	17.8%	28.6%	98.5%	0.3%	1.1%	1.9%
18826, Kingsley	1,289	16.1%	26.1%	98.4%	0.0%	1.1%	3.5%
18818, Friendsville	1,178	12.2%	22.8%	95.1%	0.3%	4.3%	0.5%
18830, Little Meadows	566	17.7%	32.0%	99.8%	0.0%	0.2%	0.0%
18844, Springville	1,944	18.2%	25.4%	98.3%	0.7%	0.6%	0.0%
18825, Jackson	69	20.3%	43.5%	87.0%	0.0%	1.4%	0.0%
18842, South Gibson	209	20.1%	22.5%	96.2%	0.0%	0.0%	0.0%
18812, Brackney	1,640	12.4%	25.6%	98.1%	0.0%	1.5%	0.8%
Pennsylvania	12,794,885	20.7%	18.3%	79.4%	11.1%	3.4%	7.6%

Source: US Census Bureau, American Community Survey



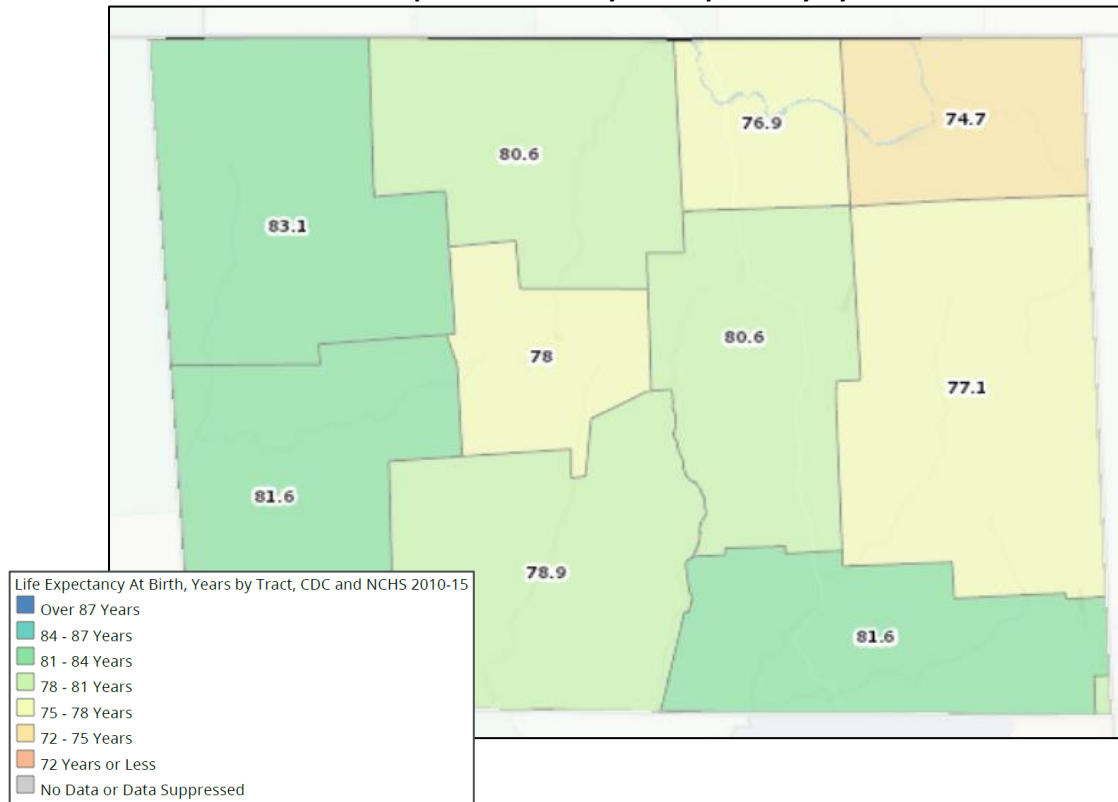
Life expectancy is another measure of the impact of social determinants of health and inequities. Susquehanna County has similar average life expectancy as Pennsylvania overall at 78.5 years. **Life expectancy disparities within Susquehanna County generally align with socioeconomic disparities, including lower life expectancy of 74.7 years in the northern portion of Susquehanna zip code 18847.** Statewide, life expectancy is highest for Asian and Latinx and lowest for Black/African American residents, a disparity that is reflective of underlying health and social inequities.

### 2018-2020 Life Expectancy by Race and Ethnicity

	Overall Life Expectancy	Asian	Black	White	Latinx origin (any race)
Susquehanna County	78.5	NA	NA	NA	NA
Pennsylvania	78.0	87.3	73.1	78.4	81.5

Source: National Vital Statistics System

### 2010-2015 Susquehanna County Life Expectancy by Census Tract



### COVID-19 Exacerbated Health and Social Disparities

The onset of the COVID-19 pandemic resulted in economic recession, evidenced in soaring food insecurity and unemployment. Nationally, food insecurity in the beginning months of the pandemic was projected to increase to 13.9% for adults and 19.9% for children. Unemployment in Susquehanna County averaged 7.3% by the end of 2020, an increase from 5.9% at the start of the year. While these



indicators have since declined, the potential long-term impacts from these experiences should continue to be monitored. Communities experiencing socioeconomic disparity before the pandemic were the most vulnerable to COVID-19 incidence and fatality and will likely require more time to fully recover.

Susquehanna County had lower COVID-19 case and death rates than the state overall, although 116 county residents are estimated to have perished due to the virus. Statewide, COVID-19 cases were more prevalent among young and middle-aged adults, but deaths occurred overwhelmingly among older adults or seniors. Susquehanna County has been challenged to vaccinate residents with approximately 44% of all residents fully vaccinated as of August 10, 2022, compared to 63% statewide. While vaccination rates among older adults were the highest in the county, they fell well below statewide averages.

Consistent with existing socioeconomic disparities, the northern portion of Susquehanna zip code 18847 and the downtown portion of Montrose zip code 18801 had the highest vulnerability to COVID-19, as estimated by the Surgo Ventures Community Vulnerability Index. Among the factors impacting this finding were older age and health issues, health system resources, and unemployment and low-income.



## Priority Health Needs

It is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within our community. In determining the issues on which to focus efforts over the next three-year cycle, EMHS collected feedback from community partners and sought to align with existing or planned community initiatives. Endless Mountains Health System will focus efforts on the following community health priorities over the next three-year cycle:

- ▶ Obesity and Diabetes
- ▶ Mental Well-Being

Strategies to address the priority areas will reflect community population trends and stakeholder feedback, as highlighted below.

### Community Overview and Trends

Susquehanna County is a rural community in northeast Pennsylvania. The county had a total population of 38,434 as of the 2020 Census, a decline of -11.4% from the 2010 Census. While most county residents (94%) identify as White, consistent with Pennsylvania overall, population growth occurred exclusively among non-White individuals. The multi-racial population nearly quadrupled from the 2010 Census.

Susquehanna County is an aging community. Nearly 24% of residents are aged 65 or older, an increase from prior years, and higher than state and national averages of 18% and 16%, respectively. The Baby Boomer Generation population aged 55 to 64 is also higher in Susquehanna County compared to state and national benchmarks, suggesting that health needs and support services for older adults will likely continue to grow in coming years. While the community is aging, youth under age 18 comprise nearly 20% of residents, reinforcing the potential impact of upstream, preventive initiatives.

Susquehanna County has a lower median household income but similar poverty levels as the state and nation. Consistent with state and national trends, poverty levels have declined but continue to disproportionately affect children. In Susquehanna County, 17.4% of children live in poverty compared to 11.7% of the population overall. Susquehanna County children have also historically experienced slightly higher rates of food insecurity than their peers statewide and nationally, although rates have also declined. It is worth noting that despite declines in child food insecurity, county-wide food insecurity rates have been generally stable, potentially indicating increasing vulnerability among adult populations, such as older adults and/or individuals with low income.

Housing is the largest single expense for most households and should represent no more than 30% of a household's monthly income. When households spend more than 30% of their income on housing, they are considered housing cost burdened and may have fewer resources for other necessities like food, transportation, and childcare. Susquehanna County has historically lower housing costs than the state and nation, but a similar or higher proportion of housing cost burdened residents, estimated at 31% of homeowners and 47% of renters. This finding likely impacts food insecurity and other economic factors.





The rise of inflation and housing costs in 2022 has contributed to additional economic strain on residents. As one Key Stakeholder Survey participant commented, *“...Many people are complaining about a lack of affordable housing in the county. People are carrying quite a bit of stress right now with the high cost of gasoline and groceries, and everything else. I know people are worrying about buying groceries and fuel this winter, and medications. This will be a huge issue for our senior citizens.”*

A zip code- and census block group-level analysis found that residents of the north central and northeast portions of Susquehanna County are more likely to experience socioeconomic disadvantage. In zip codes 18821, Great Bend and 18822, Hallstead, 15-17% of all residents and approximately 1 in 4 children live in poverty. Communities in and around Susquehanna Depot in zip code 18847, Susquehanna have maximum Area Deprivation Index scores based on measures like income, education, and employment. The health impact of these socioeconomic barriers is demonstrated in downstream health outcomes. Residents of the northeast portion of the county have the lowest average life expectancy of 74.7 years, a more than eight-year difference from residents of the northwest portion of the county.

Public health data for non-White residents are generally not reportable for Susquehanna County due to low population counts. State and national findings indicate wide disparities in chronic disease prevalence and death rates, largely affecting people of color. These disparities are consistent with socioeconomic differences and broader community inequities that contribute to unfair health opportunities and outcomes.

### [Access to Healthcare](#)

The proportion of Susquehanna County residents without health insurance has declined and meets the Healthy People 2030 goal, but low provider availability contributes to healthcare access barriers. The county has significantly lower primary, dental, and mental health provider rates than the state and nation. One Key Stakeholder Survey participant commented, *“There are limited resources in general that prevent access to medical care within the county. Transportation may be a challenge, but when there are no facilities for dialysis, cancer treatments, etc... even when there are facilities in neighboring counties, there are limitations to availability and appointment times. Facilities are closing, combining offices, and offering less services locally.”*

Prenatal care access is also a need in Susquehanna County. In 2019, approximately 62% of pregnant people received first trimester prenatal care compared to 74% statewide and 78% nationally. Trending analysis indicates that early prenatal care access has not improved and declined from an average of nearly 71% in 2016. Despite these findings, the county has historically fewer low birth weight and premature births and a low infant death rate, potentially indicating other protective factors.

The impact of access to care barriers is demonstrated in countywide death rates due to chronic disease. For example, while Susquehanna County has a lower prevalence of diabetes than the state and nation, the diabetes death rate has historically been twice as high. Similarly, county adults have a similar prevalence of high blood pressure and/or high cholesterol as the state and nation, but the heart disease death rate has generally been higher over the past decade. It is worth noting that the diabetes death rate has declined, falling nearly seven points over the past five reporting cycles.



## Health Risk Factors and Chronic Disease

Health risk factors are characteristics or exposures that increase the likelihood of a person developing a disease or health disorder. They may include socioeconomic, clinical care, and lifestyle factors, among other items. In Susquehanna County, lifestyle risk factors, particularly tobacco use, contribute to overall poorer health and chronic disease prevalence.

Approximately 22% of Susquehanna County adults report smoking compared to 18% of adults statewide and 16% of adults nationally. The proportion of people smoking during pregnancy (22%) is more than double statewide (10%) and national (6%) averages. While the proportion of youth reporting cigarette use has declined, falling to 3.9% in 2021, it has historically exceeded statewide averages.

Higher reported tobacco use among Susquehanna County residents contributes to higher prevalence and death rates due to respiratory disease, including chronic lower respiratory disease (CLRD) and chronic obstructive pulmonary disease (COPD). The CLRD death rate has declined in recent years but remains more than 10 points higher than the statewide death rate. COPD prevalence is one of 13 chronic conditions measured among older adult Medicare beneficiaries as part of the CHNA and is the only condition to exceed statewide and national prevalence, affecting nearly 13% of individuals.

Other health risk factor and chronic disease findings to note within Susquehanna County include obesity trends and older adult health needs. Susquehanna County has a lower prevalence of adult obesity than Pennsylvania and the US, but consistent with state and national trends, it has increased. Youth-related trends indicate that obesity prevalence is likely to continue to increase in the future. During the 2017-2018 school year, 26.2% of students in grades 7-12 had obesity, a slight increase from prior years and higher than the statewide average of 19.5%.

Older adults are more vulnerable to chronic disease prevalence. Nearly 68% of Susquehanna County older adult Medicare beneficiaries manage two or more chronic conditions compared to 74% statewide and 70% nationally. While Susquehanna County older adults are slightly less likely to manage multiple chronic conditions, they comprise nearly 24% of the total population, representing a significant strain on the healthcare system. It is also worth noting that 15.2% of Susquehanna County older adults live alone, a higher proportion than the state and nation. Living alone can impede effective chronic illness management and accelerate the negative impact of chronic diseases.

## Mental Health and Substance Use Disorder

Mental health and substance use disorder have historically been community health needs for Susquehanna County. While substance use disorder concerns have generally improved, mental health concerns persist countywide and increased for youth populations. Among Key Stakeholder Survey participants, more than half selected mental health conditions and two-thirds selected behavioral health treatment among the top five concerns affecting the people their organization serves. Mental health services were the top identified needed community resource by Key Stakeholder Survey participants.

One indicator of a community's mental health is the suicide death rate. Susquehanna County has historically had a higher suicide death rate than the state and nation. The death rate has been largely unchanged in recent years and was 40% higher than the statewide death rate as of 2016-2020.



Youth are among the most likely to experience mental health concerns, and data for 2021 indicate that the mental health of Susquehanna County youth was more adversely impacted by the pandemic relative to their peers statewide. In 2021, 50.8% of Susquehanna County students reported feeling consistently sad or depressed, a 6-point increase from 2019 and nearly 10 points higher than the statewide average. Nearly 15% of students reported an attempted suicide in 2021 compared to 11% statewide.

Susquehanna County youth also report higher use of substances, including alcohol and marijuana, than their peers across the state. Alcohol is the most commonly used substance among youth, and while reported use has consistently declined, it remains higher than the state at 16.8% versus 13.4%.

Vaping and e-cigarette use was identified by Key Stakeholder Survey participants as a growing substance use disorder concern among youth. One key stakeholder stated, *“Vaping is extremely popular among the county's youth. More educational programming needs to occur related to this issue.”* In 2021, nearly 19% of Susquehanna County students reported e-cigarette use compared to 13% of students statewide.

Provisional data released by the CDC predicts that 2020 and 2021 brought the highest number of overdose deaths ever in the US. Across the nation and Pennsylvania, accidental drug overdose deaths in 2020 increased 20% and 34%, respectively. Susquehanna County has historically reported more accidental drug overdose deaths than Pennsylvania and the US, but contrary to state and national trends, saw a significant decline in deaths in recent years. The most recent data for the county, reported for 2018-2020, indicate the rate of death is approximately half what it was five years ago.

Accidental overdose trends should continue to be monitored in light of pandemic-related factors. As one Key Stakeholder Survey participant commented, *“Individuals who were once stable and considered high functioning are now struggling with substance use issues and families don't know how to address this. We must market a no wrong door message to the community so that they know they can access treatment / support through EMHS or through their school district (for example).”*

Alcohol is also the most prevalent addictive substance used among adults and was the top substance among Susquehanna County patients admitted to a hospital for substance use disorder in 2019. The second most prevalent substance was opioids. It is worth noting that hospitalization rates for both substances were lower for Susquehanna County residents than Pennsylvania residents overall.

A full summary of CHNA data findings for Susquehanna County, with state and national comparisons, follows.

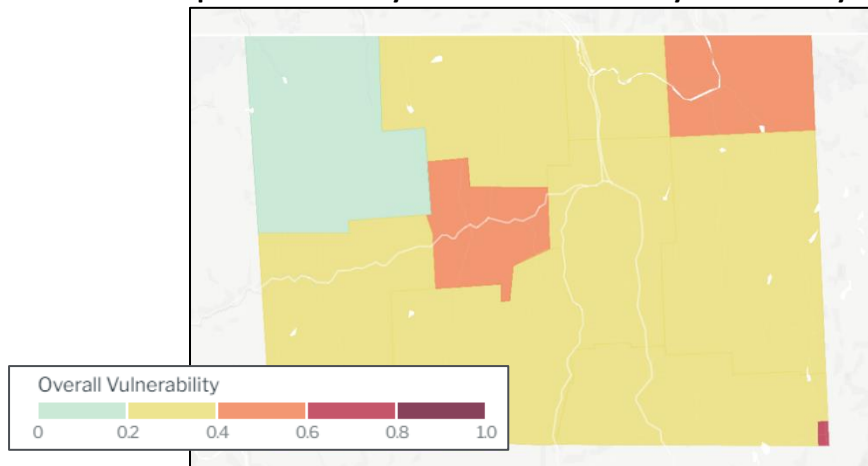


## COVID-19 Impact on Communities

COVID-19 is the name of the disease caused by the SARS-CoV-2 virus. "CO" stands for corona, "VI" for virus, and "D" for disease. The number "19" refers to the year 2019 when the first case of COVID-19 was identified. COVID-19 has not impacted all people equally. Rather, certain structural issues—population density, low income, crowded workplaces, etc.—contribute to higher levels of spread and worse outcomes from COVID-19 in select communities. Surgo Ventures developed the Community Vulnerability Index to measure how well any community in the US could respond to the health, economic, and social consequences of COVID-19 without intentional response and additional support.

**Using this scale, Susquehanna County has “Medium” vulnerability compared to other parts of the US.** Among the factors impacting this score are older age and health issues, health system resources, and unemployment and low-income. Consistent with existing socioeconomic disparities, the northern portion of Susquehanna zip code 18847 and the downtown portion of Montrose zip code 18801 had the highest vulnerability to COVID-19.

**Susquehanna County: COVID-19 Community Vulnerability Index**



Source: COVID Act Now

As of August 10, 2022, Susquehanna County had 8,835 confirmed or probable cases of COVID-19 and 116 related deaths. Based on rates per 100,000, Susquehanna County had lower rates of COVID-19 cases and deaths than the state overall. This finding may be due in part to the rural nature of the county and lower population density.

**COVID-19 Cases and Deaths (as of August 10, 2022)**

	Susquehanna County	Pennsylvania
Total Cases	8,835	2,579,964
<b>Cases per 100,000</b>	<b>21,937.6</b>	<b>24,462.6</b>
Total Deaths	116	46,374
<b>Deaths per 100,000</b>	<b>287.6</b>	<b>363.0</b>

Source: Pennsylvania Department of Health



COVID-19 vaccination has been essential to managing the pandemic and healthcare resources. **Susquehanna County has been challenged to vaccinate residents with approximately 44% of all residents fully vaccinated as of August 10, 2022, compared to 63% statewide.** When compared by age group, Susquehanna County had lower vaccine coverage across all age categories compared to the state.

#### COVID-19 Vaccination (as of August 10, 2022)

	Susquehanna County	Pennsylvania
Total People Vaccinated	20,026	10,098,973
Fully vaccinated	17,638	8,505,302
Percent fully vaccinated	43.8%	63.2%
Partially vaccinated	2,658	1,593,671
Percent partially vaccinated	6.6%	10.3%
<b>Percent of all people with at least one vaccine dose*</b>	<b>50.4%</b>	<b>73.5%</b>

Source: Pennsylvania Department of Health

\*The statewide percentage excludes Philadelphia County.

#### Residents Fully Vaccinated by Age Group (as of August 10, 2022)

	Susquehanna County	Pennsylvania
5-9 years	10.8%	26.8%
10-14 years	19.5%	40.6%
15-19 years	38.3%	53.5%
20-24 years	44.1%	58.6%
25-29 years	27.7%	55.2%
30-34 years	39.0%	61.2%
35-39 years	35.3%	65.8%
40-44 years	44.0%	70.9%
45-49 years	36.6%	63.5%
50-54 years	43.9%	69.7%
55-59 years	44.3%	70.8%
60-64 years	53.1%	79.0%
65-69 years	66.0%	90.0%
70-74 years	69.6%	93.5%
75-79 years	69.7%	95.0%
80-84 years	69.2%	94.4%
85 years or over	79.8%	92.2%

Source: Pennsylvania Department of Health





## Service Area Population Statistics

### Demographics

Since 2010, Pennsylvania saw small population growth of +2.4% compared to national population growth of +7.4%. In contrast, Susquehanna County saw population decline of -11.4%, representing a loss of 4,922 residents.

#### 2020 Total Population

	Total Population	Percent Change Since 2010
Susquehanna County	38,434	-11.4%
Pennsylvania	13,002,700	+2.4%
United States	331,449,281	+7.4%

Source: US Census Bureau, Decennial Census

**Consistent with state and national benchmarks, population growth within Susquehanna County occurred exclusively among non-White individuals.** From 2010 to 2020, the White population declined -15.2%, while the multiracial population nearly quadrupled and accounted for 4.3% of the total population in 2020. Despite increasing diversity, Susquehanna County continues to reflect a majority White population.

#### 2020 Population by Race and Ethnicity

	White	Black or African American	Asian	American Indian / Alaska Native	Native Hawaiian / Pacific Islander	Other Race	Two or More Races	Latinx origin (any race)
Susquehanna County	93.8%	0.4%	0.4%	0.2%	0.0%	0.9%	4.3%	2.2%
Pennsylvania	75.0%	10.9%	3.9%	0.2%	0.0%	3.9%	6.2%	8.1%
United States	61.6%	12.4%	6.0%	1.1%	0.2%	8.4%	10.2%	18.7%

Source: US Census Bureau, Decennial Census

#### Population Change among Prominent Racial and Ethnic Groups, 2010 to 2020

	White	Black or African American	Asian	Other Race	Two or More Races	Latinx origin (any race)
Susquehanna County	-15.2%	-7.1%	+12.2%	+143.9%	+365.2%	+50.2%
Pennsylvania	-6.3%	+3.3%	+46.2%	69.0%	+225.5%	+45.8%
United States	-8.6%	+5.6%	+35.5%	+46.1%	+275.7%	+23.0%

Source: US Census Bureau, Decennial Census



Health needs change as individuals age. Therefore, the age distribution of a community impacts its social and healthcare needs. **The age distribution and median age of Susquehanna County is older than both Pennsylvania and the nation.** Nearly one-quarter of Susquehanna County residents are aged 65 or older compared to 16% nationwide.

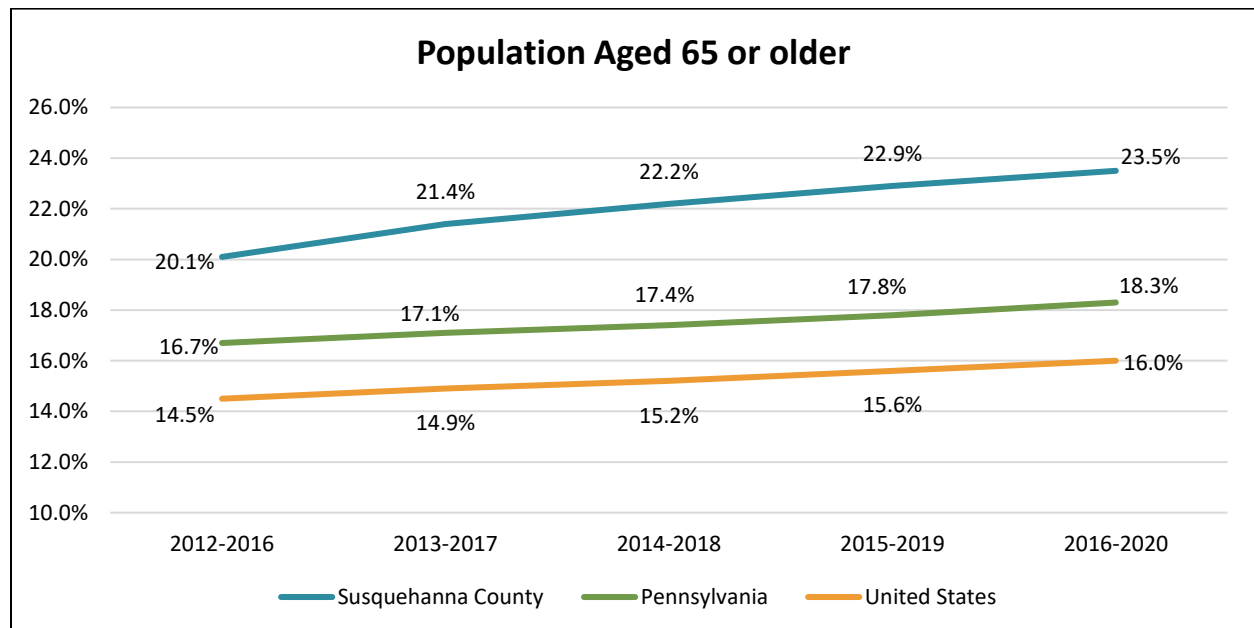
The proportion of older adult residents increased across Susquehanna County, Pennsylvania, and the nation. Nationally, among older adults aged 65 or older, the 65-74 age category is the fastest growing demographic, largely due to the aging of the baby boomer generation.

**While the older adult population increased in Susquehanna County, youth under age 18 comprise nearly 1 in 5 residents.** This finding reinforces the potential impact of upstream, preventative initiatives.

**2016-2020 Population by Age**

	Gen Z/ Gen C	Gen Z	Millennial	Millennial/ Gen X	Gen X	Boomers	Boomers/ Silent	Median Age
	Under 18 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	
Susquehanna County	18.7%	6.9%	10.1%	10.1%	13.4%	17.3%	23.5%	48.7
Pennsylvania	20.7%	9.0%	13.2%	11.7%	12.9%	14.1%	18.3%	40.9
United States	22.4%	9.3%	13.9%	12.6%	12.7%	12.9%	16.0%	38.2

Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey



## Income and Work

Susquehanna County has a lower median household income than the state and nation, but similar poverty levels. **Consistent with the state and nation, poverty levels within Susquehanna County have declined.** While these findings reflect positive outcomes overall, it is worth noting that children continue to be disproportionately affected by poverty, estimated at nearly 1 in 5 countywide.

Statewide and nationally, poverty levels are disproportionately higher among people of color. Across Pennsylvania, poverty among Black/African Americans, Latinx, multiracial and other race individuals is more than double the rate seen among Whites. Poverty data by race and ethnicity are not shown for Susquehanna County due to low counts.

Note, income and poverty data reflect aggregated findings for 2016-2020 and may not demonstrate economic hardship experienced by individuals and families during the pandemic. Unemployment data for 2020 provide insight into the economic impact of the pandemic.

By the end of 2020, average unemployment for the US was approximately double what it was at the beginning of the year. **Susquehanna County had higher unemployment than the state and nation before the pandemic and it increased in 2020, although to a smaller degree than what was seen statewide or nationally.** Unemployment has since declined, falling below pre-pandemic levels, although the potential long-term impacts from this experience should continue to be monitored.

### Economic Indicators

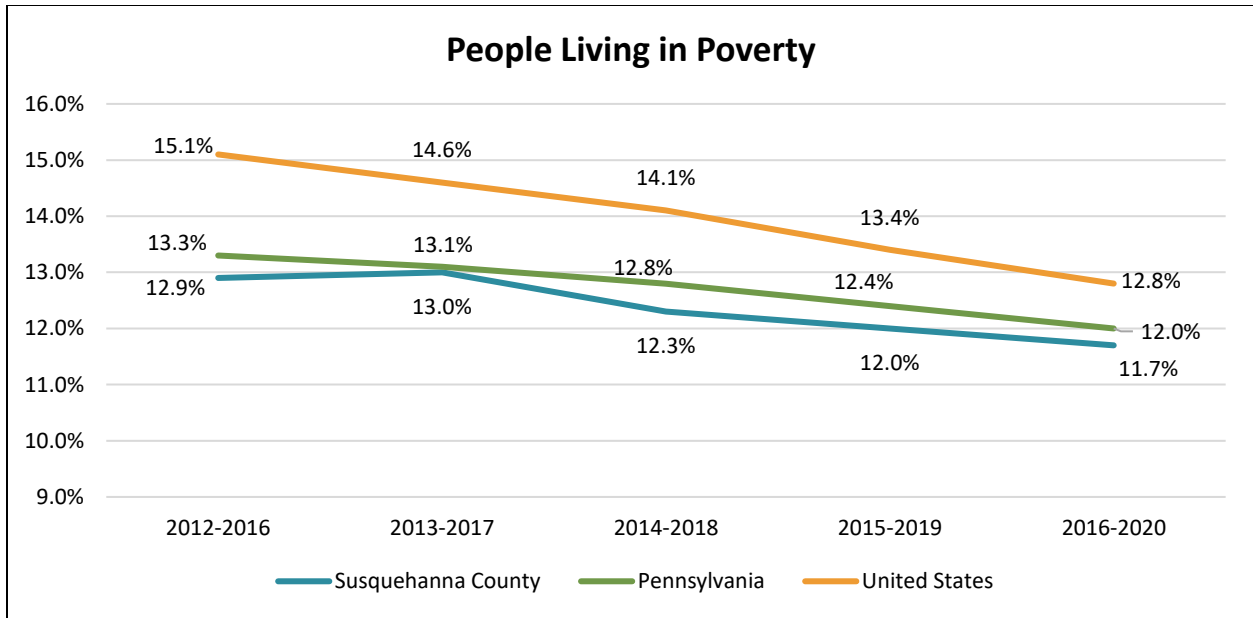
	Susquehanna County	Pennsylvania	United States
<b>Income and Poverty (2016-2020)</b>			
Median household income	\$55,788	\$63,627	\$64,994
People in poverty	11.7%	12.0%	12.8%
Children in poverty	17.4%	16.7%	17.5%
Older adults (65+) in poverty	7.9%	8.2%	9.3%
<b>Unemployment</b>			
January 2020	5.9%	4.8%	4.0%
2020 average	7.3%	9.1%	8.1%
June 2022	3.9%	4.5%	3.6%

Source: US Census Bureau, American Community Survey & US Bureau of Labor Statistics

### 2016-2020 People in Poverty among Prominent Racial and Ethnic Groups

	White	Black / African American	Asian	Other Race	Two or More Races	Latinx origin (any race)
Pennsylvania	9.7%	26.0%	13.9%	31.4%	22.0%	28.1%
United States	10.6%	22.1%	10.6%	19.7%	15.1%	18.3%

Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey

### Food Insecurity

Food insecurity is defined as not having reliable access to a sufficient amount of nutritious, affordable food. Food insecurity is associated with lower household income and poverty, as well as poorer overall health status. Similar to unemployment rates, COVID-19 had a profound impact on food insecurity, particularly among children. Nationally, food insecurity in the beginning months of the pandemic was projected to increase to 13.9% for adults and 19.9% for children.

**Susquehanna County has historically had higher food insecurity rates among children than the state overall, although the rate has declined.** In contrast, estimated food insecurity among all county residents has been generally stable, potentially indicating increasing vulnerability among adult populations.

### Food Insecurity

	Susquehanna County	Pennsylvania	United States
<b>All Residents</b>			
2020	10.7%	8.9%	11.8%
2019	11.4%	10.6%	10.9%
2018	10.8%	10.9%	11.5%
<b>Children</b>			
2020	14.9%	13.1%	16.1%
2019	16.3%	14.7%	14.6%
2018	16.9%	15.1%	15.2%

Source: Feeding America



## Education

High school graduation is one of the strongest predictors of longevity and economic stability. A similar proportion of Susquehanna County adults complete high school as the state overall, although fewer adults pursue higher education. Approximately 19.2% of Susquehanna County adults have a bachelor's degree or higher compared to 32.3% statewide. Educational attainment data by race and ethnicity are not shown for Susquehanna County due to low counts. Statewide and nationally, significant educational attainment disparities affect people of color, particularly Black/African Americans and Latinx.

### 2016-2020 Educational Attainment

	Less than high school diploma	High school graduate (includes GED)	Some college or associate's degree	Bachelor's degree	Graduate or professional degree
Susquehanna County	9.5%	45.9%	25.4%	12.5%	6.7%
Pennsylvania	9.0%	34.2%	24.5%	19.5%	12.8%
United States	11.5%	26.7%	28.9%	20.2%	12.7%

Source: US Census Bureau, American Community Survey

### 2016-2020 Population with a Bachelor's Degree by Prominent Racial and Ethnic Group

	White	Black / African American	Asian	Other Race	Two or More Races	Latinx origin (any race)
Pennsylvania	33.3%	20.2%	56.3%	14.1%	31.9%	18.2%
United States	34.4%	22.6%	55.0%	13.1%	29.7%	17.6%

Source: US Census Bureau, American Community Survey

## Housing

Housing is the largest single expense for most households and should represent no more than 30% of a household's monthly income. **Housing costs are lower in Susquehanna County than the state and nation, but a similar or higher proportion of homeowners and renters are considered housing cost burdened.** This finding may be due to lower overall household incomes among county residents.

Susquehanna County has slightly newer housing stock than the state with fewer than 59% housing units built before 1980 and 4% of units built after 2009 compared to 3.4% statewide.

### 2016-2020 Housing Indicators

	Owners			Renters		
	Occupied Units	Median Home Value	Cost-Burdened*	Occupied Units	Median Rent	Cost-Burdened*
Susquehanna County	77.4%	\$173,100	30.6%	22.6%	\$761	46.4%
Pennsylvania	69.0%	\$187,500	24.2%	31.0%	\$958	46.7%
United States	64.4%	\$229,800	27.4%	35.6%	\$1,096	49.1%

Source: US Census Bureau, American Community Survey

\*Defined as spending 30% or more of household income on rent or mortgage expenses.





### 2016-2020 Housing by Year Built

	Before 1980	1980-1999	2000-2009	2010-2013	2014 or Later
Susquehanna County	58.2%	29.1%	8.9%	2.9%	1.1%
Pennsylvania	69.2%	19.2%	8.1%	1.6%	1.8%
United States	52.9%	27.3%	13.6%	2.7%	3.5%

Source: US Census Bureau, American Community Survey

Quality housing has a direct impact on health. Unhealthy housing puts residents at risk of health issues including lead poisoning, asthma, injury, and other chronic diseases. Housing built before 1979 may contain lead paint and other hazardous materials like asbestos.

Pennsylvania residents have a higher prevalence of asthma than their peers nationwide. As of 2020, 10.6% of Pennsylvania adults reported having a current asthma diagnosis compared to 9.6% nationally.

Asthma is the most common chronic condition among children, and a leading cause of hospitalization and school absenteeism. Fewer Susquehanna County school students have an asthma diagnosis when compared to the state, and consistent with statewide trends, prevalence has declined.

### Youth Asthma Prevalence by School Year

	Susquehanna County	Pennsylvania
2017-2018	6.6%	11.3%
2016-2017	6.6%	11.9%
2015-2016	7.4%	12.1%

Source: Pennsylvania Department of Health

Related to housing concerns is access to computers and internet service. Termed the "digital divide," there is a growing gap between demographics and regions that have access to modern information and communications technology and those that don't or have restricted access, particularly affecting poor, rural, elderly, and disabled populations.

Susquehanna County has similar digital access as the state overall, although both fall slightly below national averages. **Lack of digital access created additional disparities during the COVID-19 pandemic as most health, social, and education services were provided virtually.**

### 2016-2020 Households by Digital Access

	With Computer Access			With Internet Access	
	Computer Device	Desktop / Laptop	Smartphone	Internet Subscription	Broadband Internet
Susquehanna County	89.1%	76.7%	71.1%	84.5%	83.2%
Pennsylvania	89.6%	76.7%	78.8%	84.5%	84.0%
United States	91.9%	78.3%	83.7%	85.5%	85.2%

Source: US Census Bureau, American Community Survey



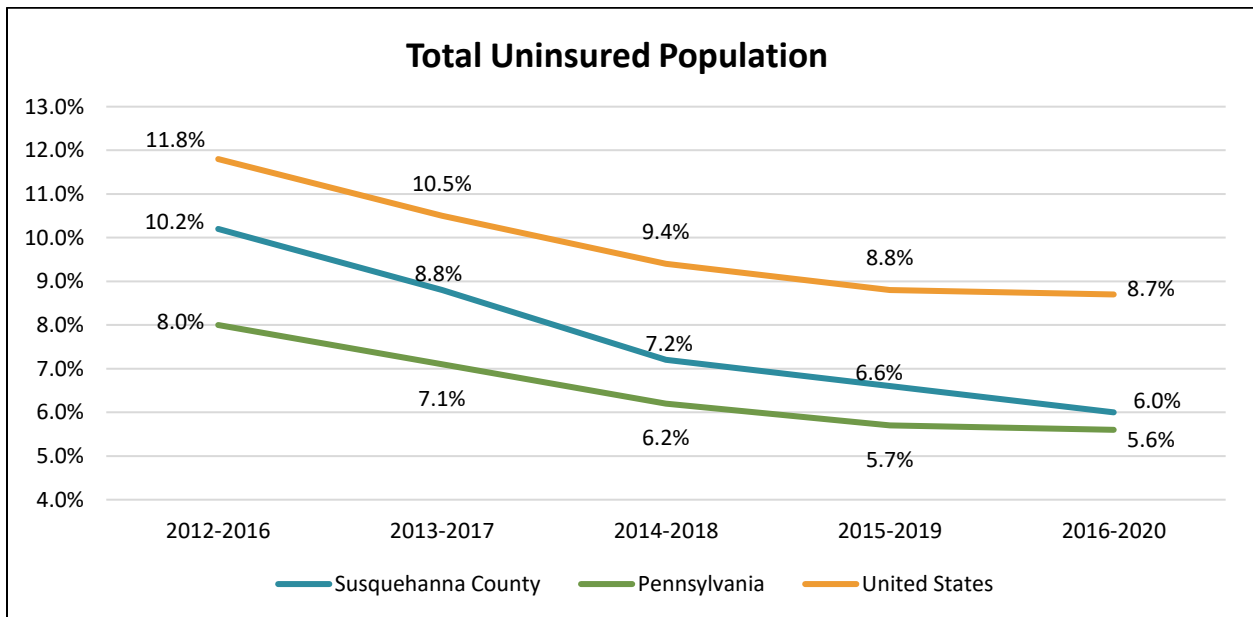
## Our Health Status as a Community

### Access to Healthcare

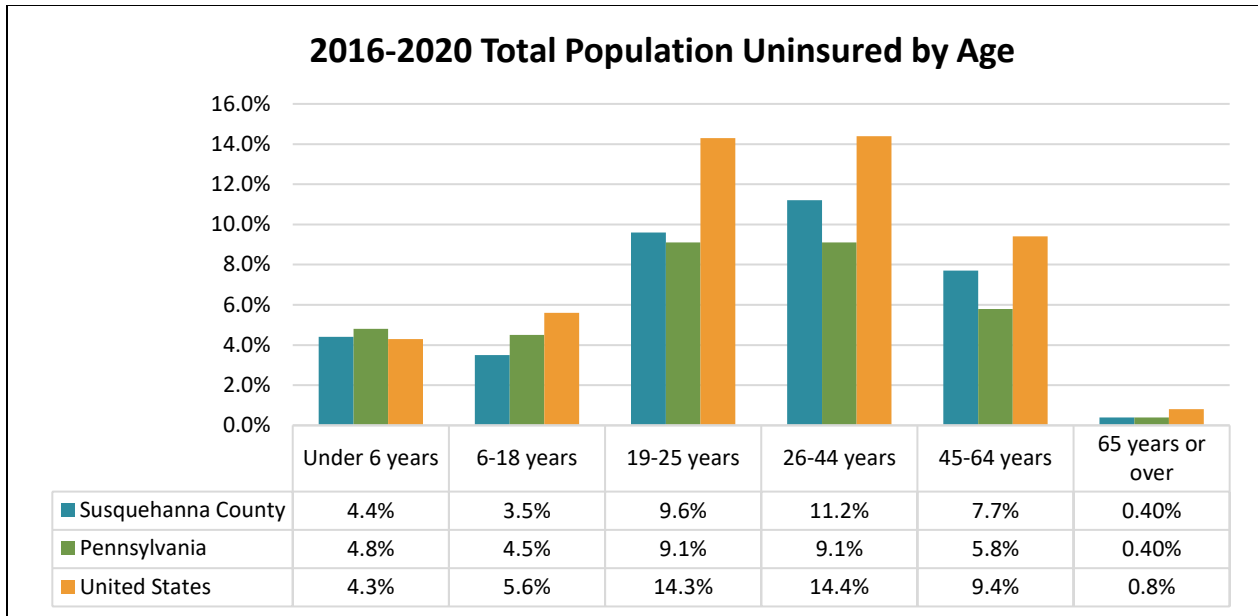
**Consistent with Pennsylvania overall, Susquehanna County has fewer uninsured residents than the nation and meets the HP2030 goal of 92.1% insured residents.** However, consistent with past CHNA findings, Susquehanna County has a higher proportion of uninsured working-age adults than the state, particularly among adults aged 26-44 (11.2% uninsured).

Consistent with age demographics for the county, 25% of Susquehanna County residents have Medicare insurance compared to 19.6% statewide and 17.3% nationally. Fewer residents have employer-based insurance, and a similar proportion have Medicaid insurance as the state overall.

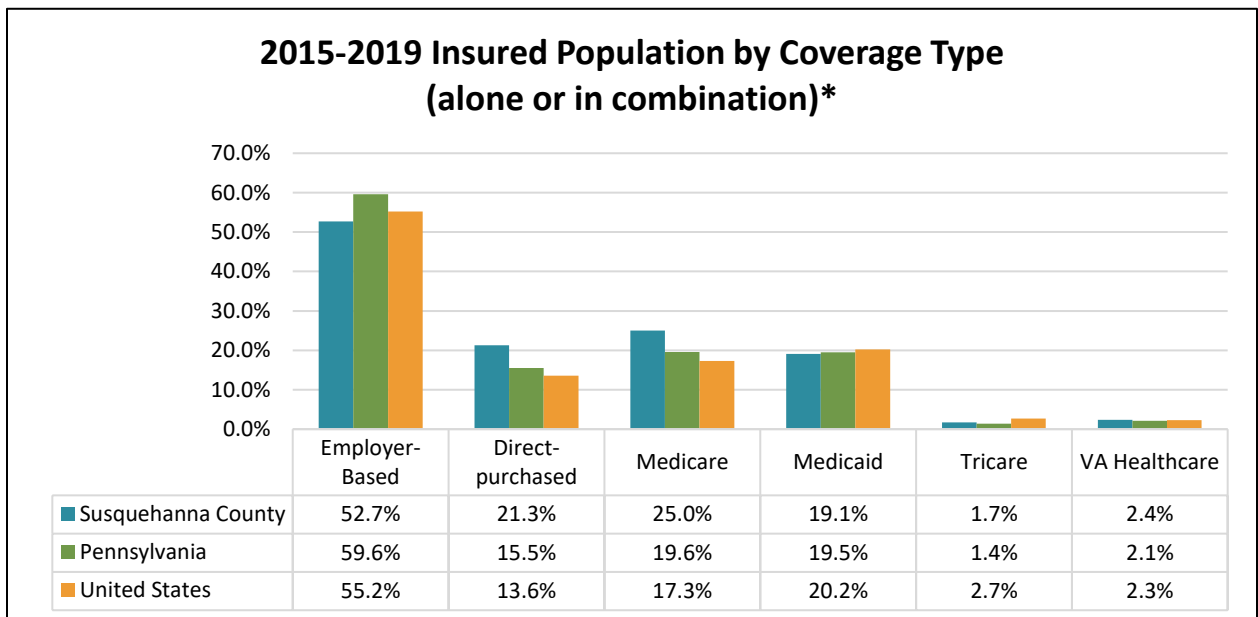
Uninsured data by race and ethnicity are not shown for Susquehanna County due to low counts. Nationally, individuals identifying as an “other race” and/or Latinx have among the highest uninsured rates of 19.8% and 17.7% respectively, compared to the White uninsured rate of 7.6%. Multiracial individuals, the fastest growing demographic within Susquehanna County, also have a high uninsured percentage of 10.7%.



Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey 2016-2020



Source: US Census Bureau, American Community Survey

\*Private health insurance coverage data are not reported for Susquehanna County for 2016-2020. Public coverage data are reported as the following: Medicare (25.7%), Medicaid (21.1%), VA Healthcare (2.1%).

Availability of healthcare providers impacts access to care and health outcomes. Susquehanna County has fewer primary care providers than the state and nation, and the rate of primary care physicians in the county has been generally stable since 2015. **Despite having lower availability of primary care**



physicians, approximately three-quarters of adults have had a recent checkup, a similar proportion as the state and nation overall.

Susquehanna County also has fewer dentists than the state and the nation and is a designated Health Professional Shortage Area (HPSA) for low-income populations. Approximately 61% of adults in Susquehanna County report receiving recent dental care compared to 69% statewide and 66% nationally. This proportion falls to 57.5-60% in Susquehanna Depot, Great Bend, and Hallstead, areas of higher community socioeconomic need.

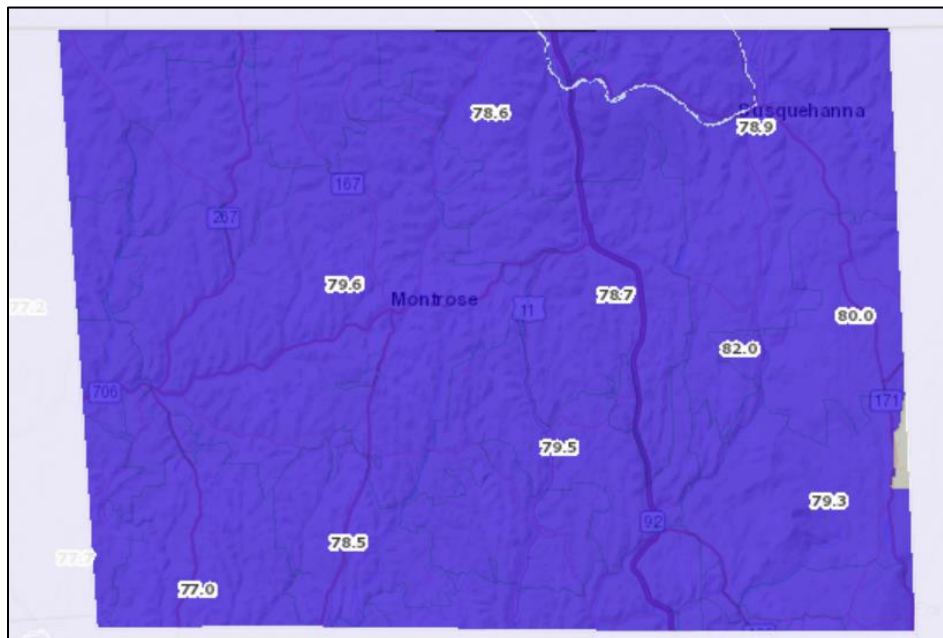
COVID-19 had a significant impact on access to care. Nationally, the percentage of adults receiving a routine physical checkup declined from 77.6% in 2019 to 76% in 2020. Pennsylvania differed from the nation in that the percentage of adults receiving a routine physical checkup remained stable at 77.7%. Note: county-level data for 2020 are not yet available.

### Primary and Dental Provider Rates and Adult Healthcare Access

	Primary Care		Dental Care	
	Physicians per 100,000 Population (2019)	Routine Checkup within Past Year (2019)*	Dentists per 100,000 Population (2020)	Dental Visit within Past Year (2018)*
Susquehanna County	37.2	76.2%	20.0	61.1%
Pennsylvania	81.8	77.7%	71.1	69.4%
United States	75.7	77.6%	71.4	66.2%

Source: Health Resources and Services Administration & Centers for Disease Control and Prevention, PLACES & BRFSS  
 \*Data are reported as age-adjusted percentages.

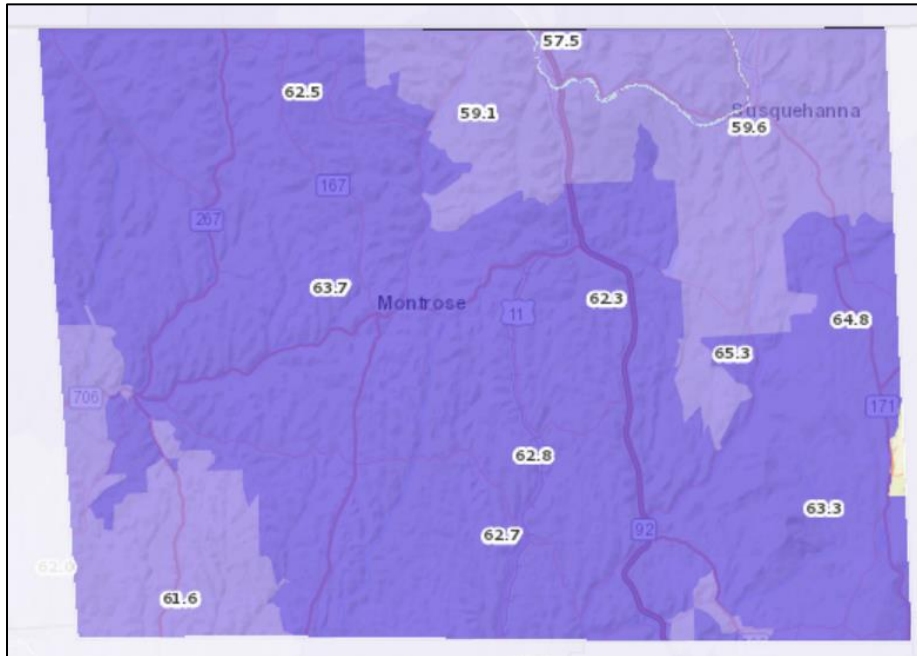
### Adults with a Primary Care Visit Within the Past Year by Zip Code, 2019



Source: Centers for Disease Control and Prevention, PLACES



### Adults with a Dental Care Visit Within the Past Year by Zip Code, 2018



Source: Centers for Disease Control and Prevention, PLACES

### Health Risk Factors and Chronic Disease

Residents of Susquehanna County have historically reported more health risk factors such as physical inactivity and smoking than their peers statewide and nationally. **In 2019, more than one-quarter of county adults reported being physically inactive and 22% reported smoking.** These factors, combined with access to care barriers, have contributed to higher death rates due to conditions like diabetes and chronic lower respiratory disease, although rates have improved in recent years.

The following report sections further explore health risk factors and chronic disease, and their connection to underlying social determinants of health. Social determinants of health not only lead to poorer health outcomes and the onset of disease, but they are also likely to impede disease management and treatment efforts, further exacerbating poorer health outcomes.

#### 2019 Age-Adjusted Adult Health Risk Factors

	No Leisure-Time Physical Activity in Past 30 Days	Current Smokers
Susquehanna County	28.0%	22.4%
Pennsylvania	24.6%	17.8%
United States	25.6%	15.7%

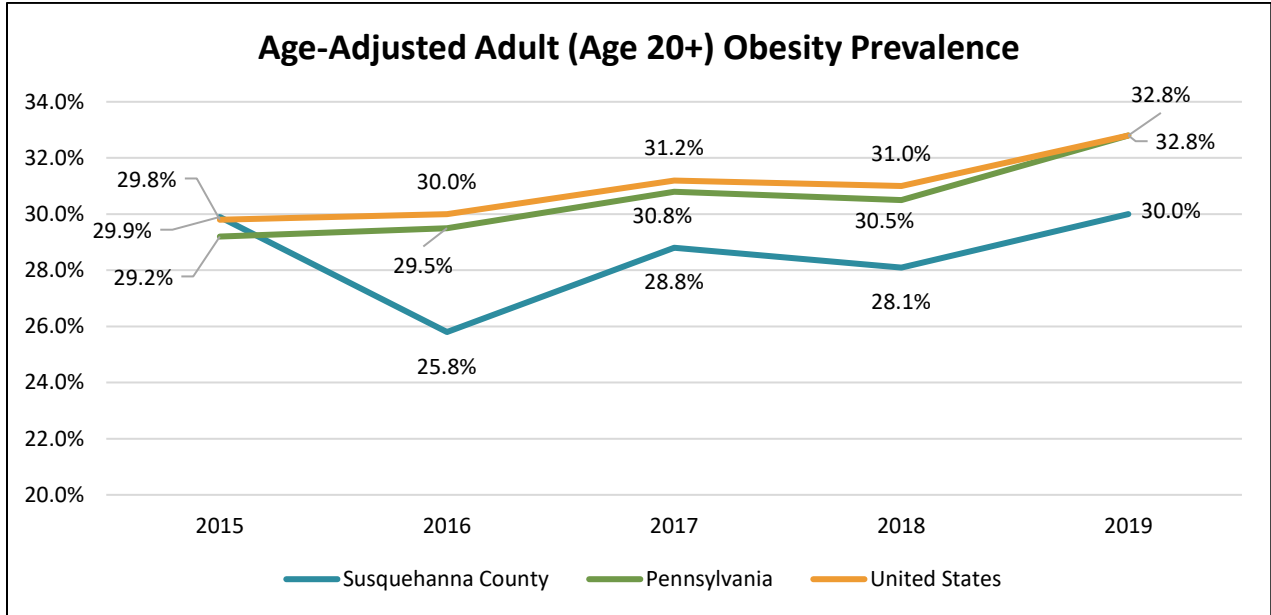
Source: Centers for Disease Control and Prevention, PLACES & BRFSS

### Obesity and Diabetes

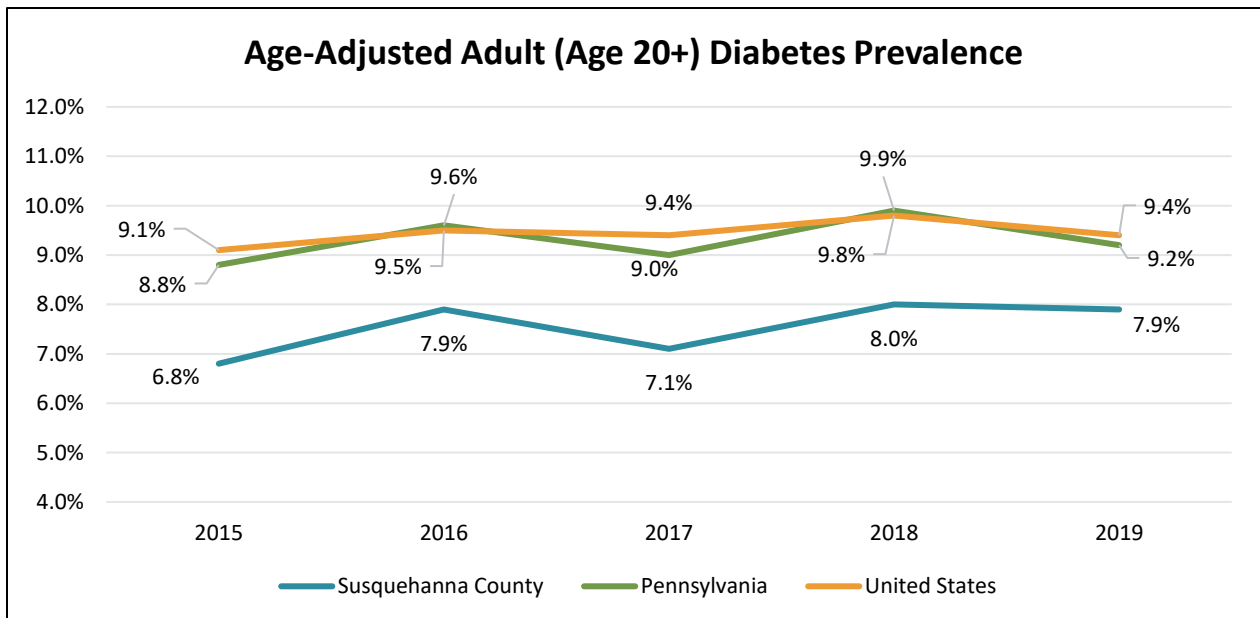
Consistent with the nation, adult obesity prevalence in Pennsylvania and Susquehanna County has increased, affecting approximately 30% of adults in 2019. Diabetes prevalence has been generally stable



in recent years and affected a slightly lower proportion of Susquehanna County residents than the state overall. **Despite a lower prevalence of diabetes and overall decline in related deaths, the diabetes death rate for Susquehanna County residents is nearly double the statewide average.** This finding may reflect health risk factors and access to care barriers, and related impacts on disease management.

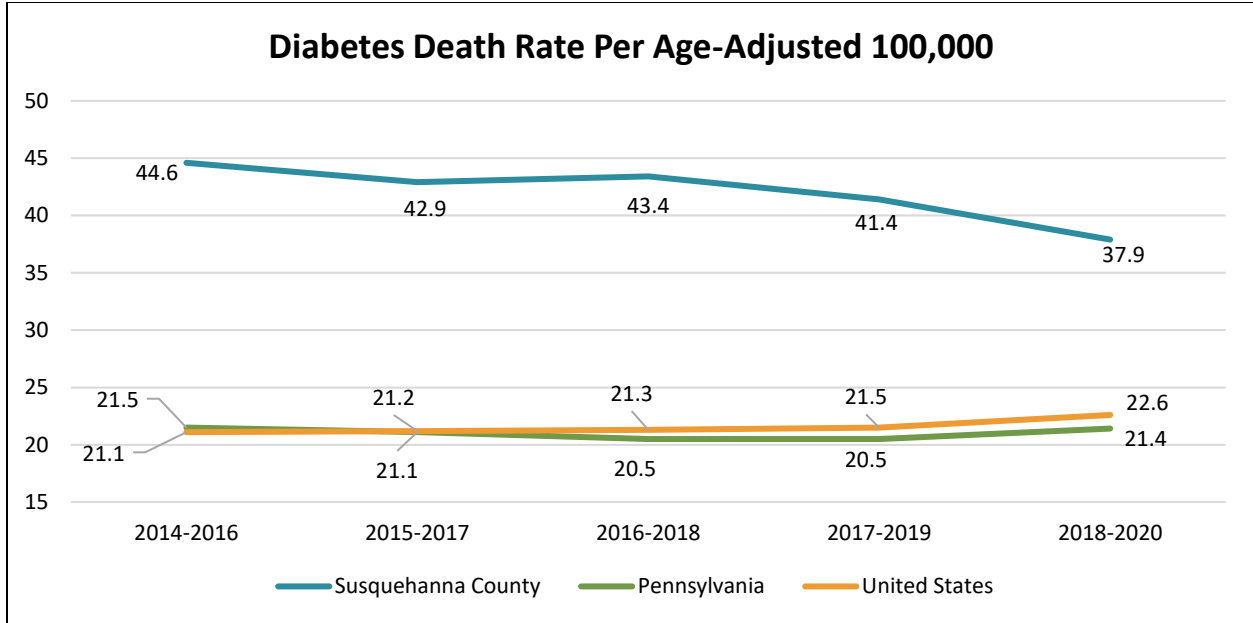


Source: Centers for Disease Control and Prevention, BRFSS



Source: Centers for Disease Control and Prevention, BRFSS





Source: Centers for Disease Control and Prevention

#### 2018-2020 Diabetes Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Susquehanna County	Pennsylvania	United States
Total Population	37.9	21.4	22.6
White, Non-Hispanic	38.1	20.3	19.7
Black or African American, Non-Hispanic	NA	33.6	41.3
Latinx origin (any race)	NA	23.8	27.2

Source: Centers for Disease Control and Prevention

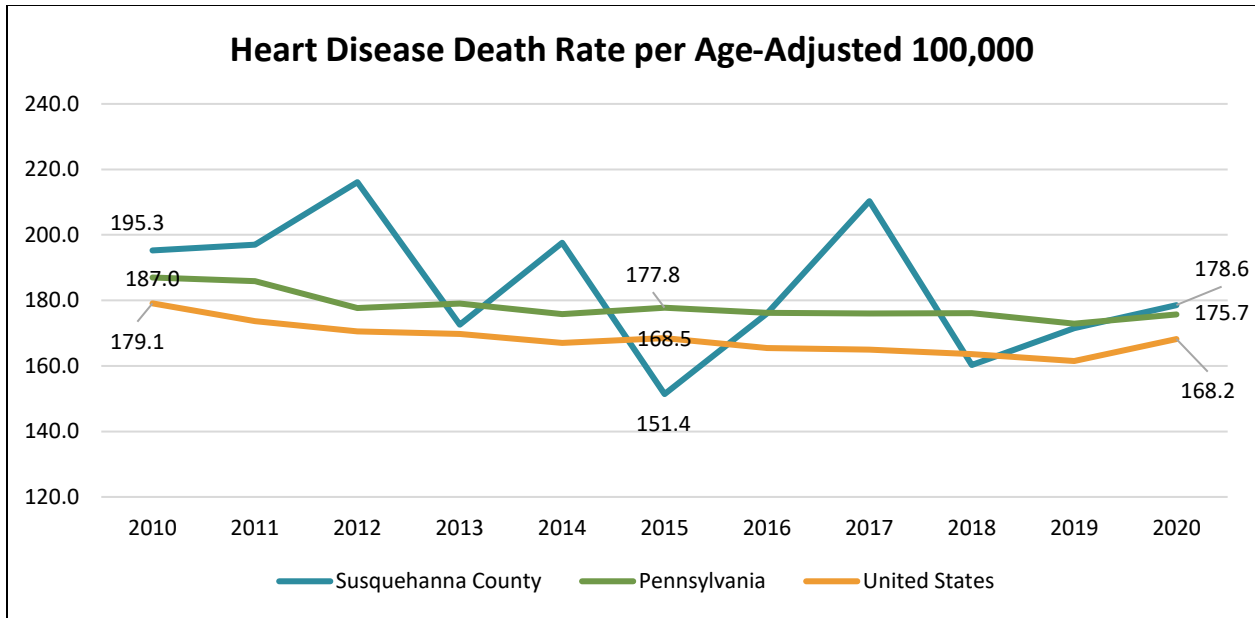
#### Heart Disease

Heart disease is the leading cause of death nationally. High blood pressure and high cholesterol are two of the primary causes of heart disease and can be preventable. Susquehanna County has a similar prevalence of high blood pressure and high cholesterol as the state. The county also has a similar heart disease death rate as the state as of 2020, although the rate has been variable over the past decade and generally higher than state and national benchmarks.

#### 2019 Age-Adjusted Adult Heart Disease Risk Factors

	Adults with High Blood Pressure	Adults with High Cholesterol
Susquehanna County	29.7%	28.4%
Pennsylvania	29.2%	28.4%
United States	29.6%	28.7%

Source: Centers for Disease Control and Prevention, PLACES & BRFSS



Source: Centers for Disease Control and Prevention

#### 2020 Heart Disease Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Susquehanna County	Pennsylvania	United States
Total Population	178.6	175.7	168.2
White, Non-Hispanic	179.0	172.0	170.1
Black or African American, Non-Hispanic	NA	252.7	228.6
Latinx origin (any race)	NA	109.5	122.7

Source: Centers for Disease Control and Prevention

#### Cancer

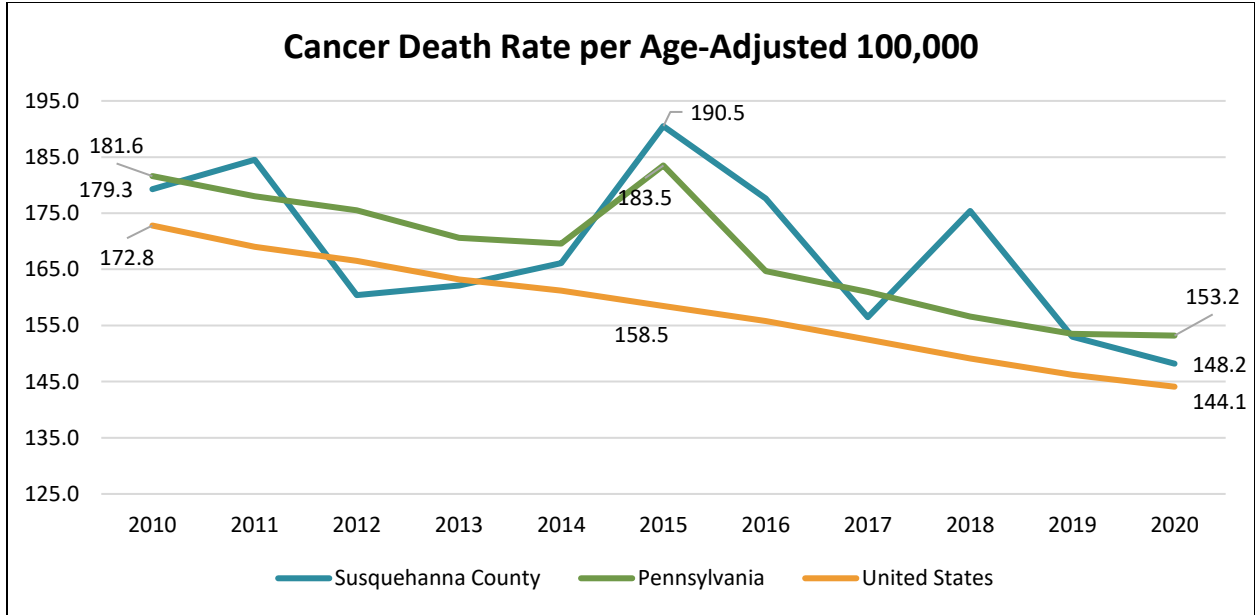
Cancer is the second leading cause of death nationally. **Susquehanna County has lower cancer incidence than the state and nation, and a declining rate of cancer death that generally mirrors statewide trends.** Consistent with the state and nation, lung cancer continues to be the top cancer-related cause of death for Susquehanna County residents, and the death rate increased slightly from the 2019 CHNA, from 36.4 to 37.8 per 100,000.

Other cancer trends to note within Susquehanna County include higher rates of death due to female breast and colorectal cancers than the state and nation, despite overall lower incidence of these conditions. This finding may reflect access to care barriers, contributing to delayed screening and later stage treatment.

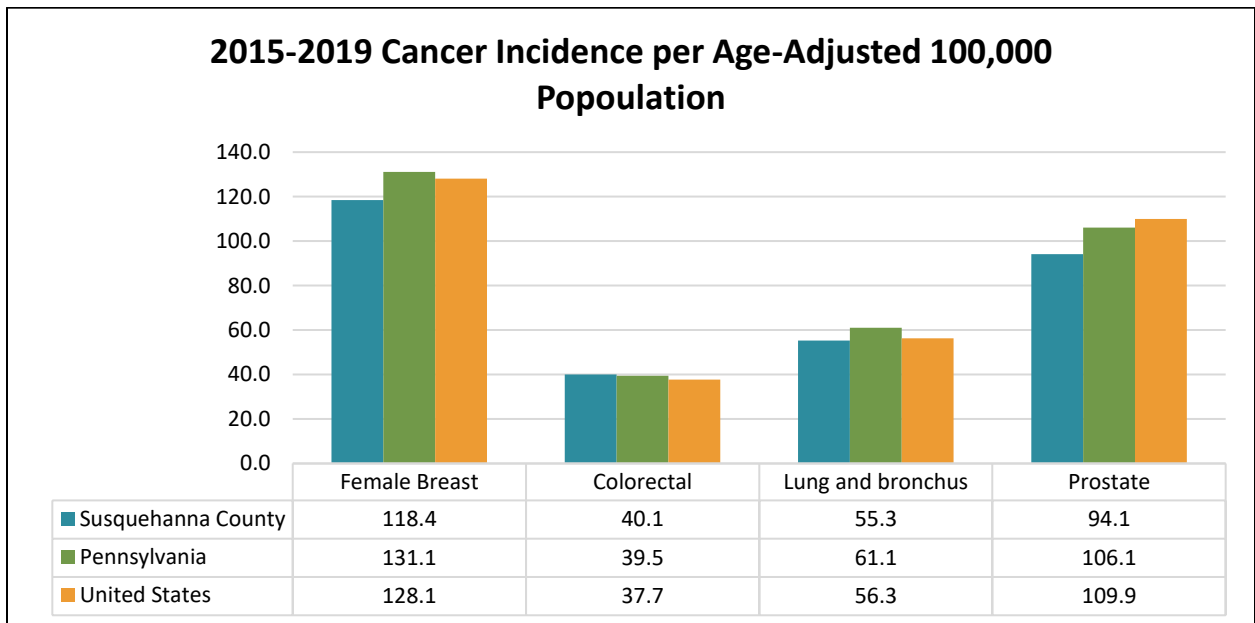
#### 2015-2019 Cancer Incidence (All Types) per Age-Adjusted 100,000

Susquehanna County	Pennsylvania	United States
441.0	462.2	449.4

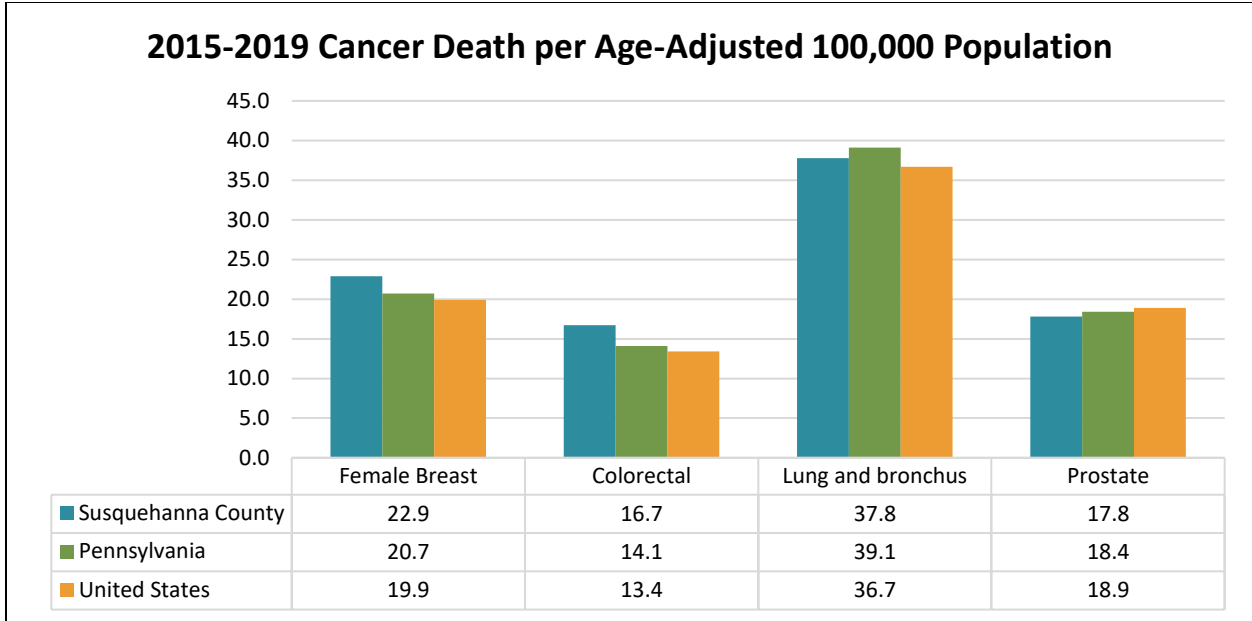
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention



Source: Centers for Disease Control and Prevention



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention

#### Respiratory Disease

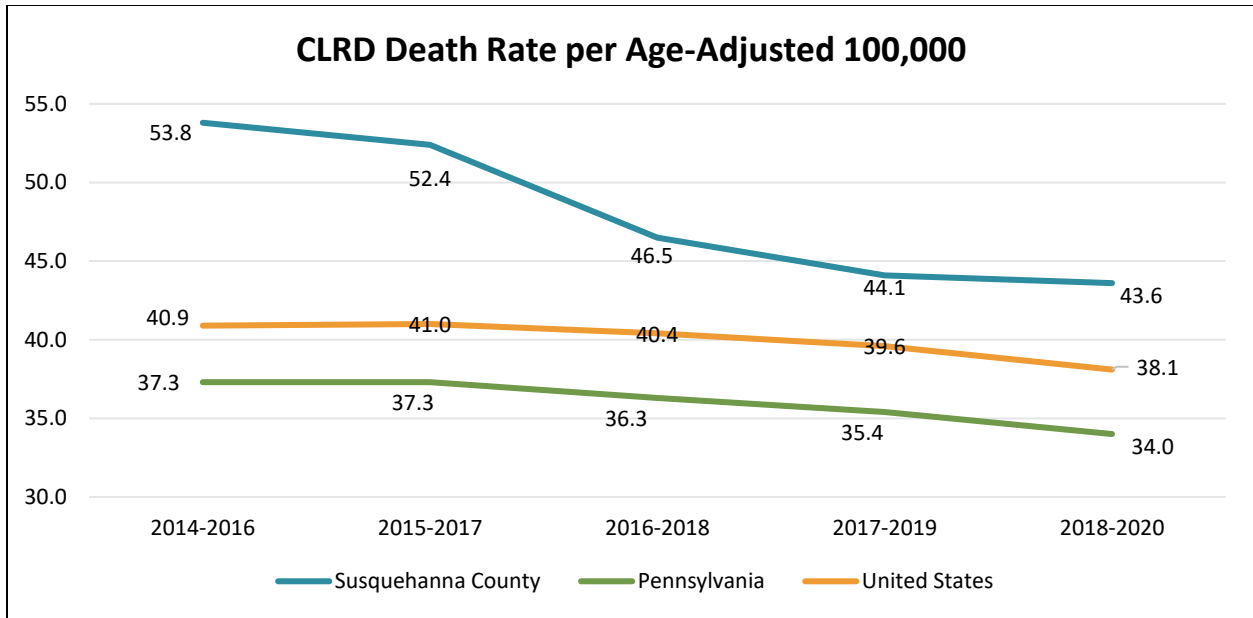
Chronic lower respiratory disease (CLRD) includes several chronic conditions of the respiratory tract, including chronic obstructive pulmonary disease (COPD). **Consistent with historically higher smoking rates, Susquehanna County has a higher prevalence of COPD than the state and nation overall.**

Susquehanna County also has a higher rate of death due to CLRD, although the death rate continued to decline in recent years.

#### 2019 Age-Adjusted Adult COPD Diagnosis

	Adults with COPD
Susquehanna County	7.4%
Pennsylvania	6.2%
United States	5.9%

Source: Centers for Disease Control and Prevention, PLACES & BRFS



Source: Centers for Disease Control and Prevention

### Aging Population

Susquehanna County is an aging community, and older adults are generally more vulnerable to chronic conditions, including multiple chronic conditions or comorbidities. Among Medicare beneficiaries aged 65 or older, approximately 68% in Susquehanna County have two or more chronic conditions compared to state and national averages of 74% and 70% respectively. **Approximately 14% of Susquehanna County older adult Medicare beneficiaries have six or more chronic conditions compared to 19% statewide and 18% nationally.**

#### 2018 Chronic Condition Comorbidities among Medicare Beneficiaries 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Susquehanna County	32.2%	31.8%	22.1%	13.9%
Pennsylvania	26.2%	31.0%	24.1%	18.7%
United States	29.7%	29.4%	22.8%	18.2%

Source: Centers for Medicare & Medicaid Services

Older adult healthcare utilization and costs increase significantly with a higher number of reported chronic diseases. Tracking these indicators helps plan allocation of resources to best anticipate and serve need in the community. When compared to the state, **Susquehanna County generally has similar or lower per capita spending among older adult Medicare beneficiaries. Contrary to this finding, Susquehanna County has a higher rate of emergency department (ED) visits among beneficiaries.** This finding may be due in part to access to care barriers experienced by residents.



### 2018 Per Capita Standardized Spending\* for Medicare Beneficiaries Aged 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Susquehanna County	\$1,790	\$5,268	\$10,485	\$28,077
Pennsylvania	\$1,930	\$5,183	\$10,125	\$28,954
United States	\$1,944	\$5,502	\$10,509	\$29,045

Source: Centers for Medicare & Medicaid Services

\*Standardized spending takes into account payment factors that are unrelated to the care provided (e.g. geographic variation in Medicare payment amounts).

### 2018 ED Visits per 1,000 Medicare Beneficiaries Aged 65 Years or Older

	0 to 1 Condition	2 to 3 Conditions	4 to 5 Conditions	6 or More Conditions
Susquehanna County	156	355	602	1,669
Pennsylvania	117	285	579	1,667
United States	123	318	621	1,719

Source: Centers for Medicare & Medicaid Services

Nationally, the most common chronic conditions among older adult Medicare beneficiaries, in order of prevalence, are hypertension, high cholesterol, and arthritis. This finding is consistent for Pennsylvania and Susquehanna County. **Susquehanna County has a similar or lower prevalence of all reported conditions as the state and nation, except for COPD. This finding is consistent with historically higher smoking rates among adults.**

### 2018 Chronic Condition Prevalence among Medicare Beneficiaries Aged 65 Years or Older

	Susquehanna County	Pennsylvania	United States
Alzheimer's Disease	8.0%	11.8%	11.9%
Arthritis	34.7%	36.6%	34.6%
Asthma	3.7%	4.8%	4.5%
Cancer	9.3%	10.1%	9.3%
Chronic Kidney Disease	19.6%	25.4%	24.9%
COPD	12.8%	10.9%	11.4%
Depression	9.9%	16.5%	16.0%
Diabetes	25.8%	26.2%	27.1%
Heart Failure	12.2%	14.2%	14.6%
High Cholesterol	49.6%	56.2%	50.5%
Hypertension	57.6%	61.9%	59.8%
Ischemic Heart Disease	26.4%	29.3%	28.6%
Stroke	3.4%	4.5%	3.9%

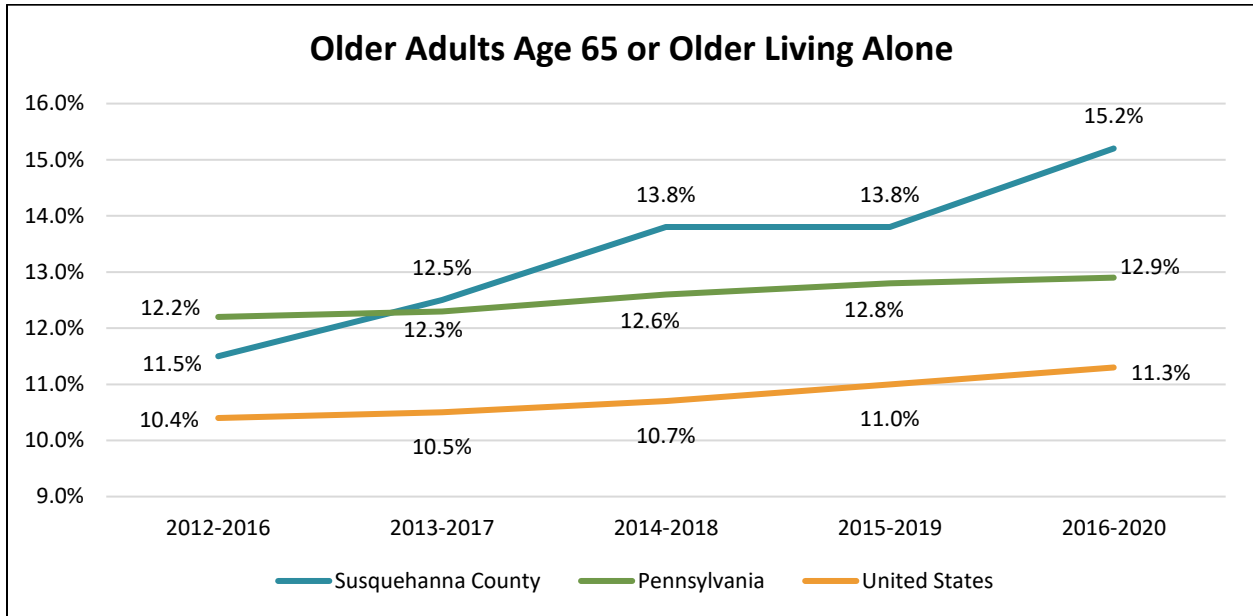
Source: Centers for Medicare & Medicaid Services

In older adults, chronic illness often leads to diminished quality of life and increased social isolation. Social isolation may also impede effective chronic illness management and accelerate the





negative impact of chronic diseases. One indicator of social isolation among older adults is the percentage who live alone. **Susquehanna County older adults are more likely to live alone when compared to their peers across the state and nation, and the proportion has increased.**



Source: US Census Bureau, American Community Survey

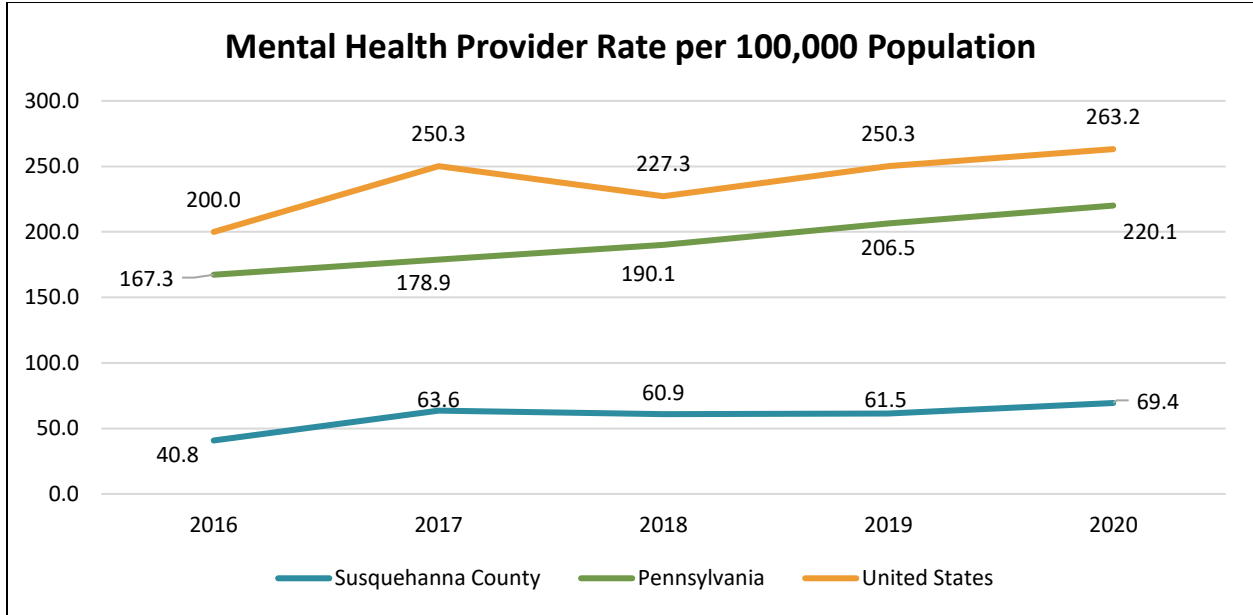
\*Data for Susquehanna County are not reported for 2015-2019.

### Mental Health and Substance Use Disorder

Consistent with the state and nation, access to mental healthcare is improving within Susquehanna County, although the rate of providers remains less than one-third of the statewide rate. Note: The mental health provider rate includes psychiatrists, psychologists, licensed clinical social workers, counselors, and mental health providers that treat alcohol and other drug abuse, among others. It does not account for potential shortages in specific provider types.

Adults in Susquehanna County report an average of 5.1 poor mental health days per month, a slightly higher average than the state and nation overall. Frequent mental distress is a risk factor for suicide. **Susquehanna County has historically had a higher suicide death rate than the state and nation, and the death rate has been generally stable over the last decade.**

From 2016 to 2020, Susquehanna County experienced 42 suicide-related deaths for a rate of death that was 40% higher than the statewide average. Thirty of the deaths occurred among males. Ten deaths were among older adults aged 55 to 64. Other demographic factors are not reported due to low counts.

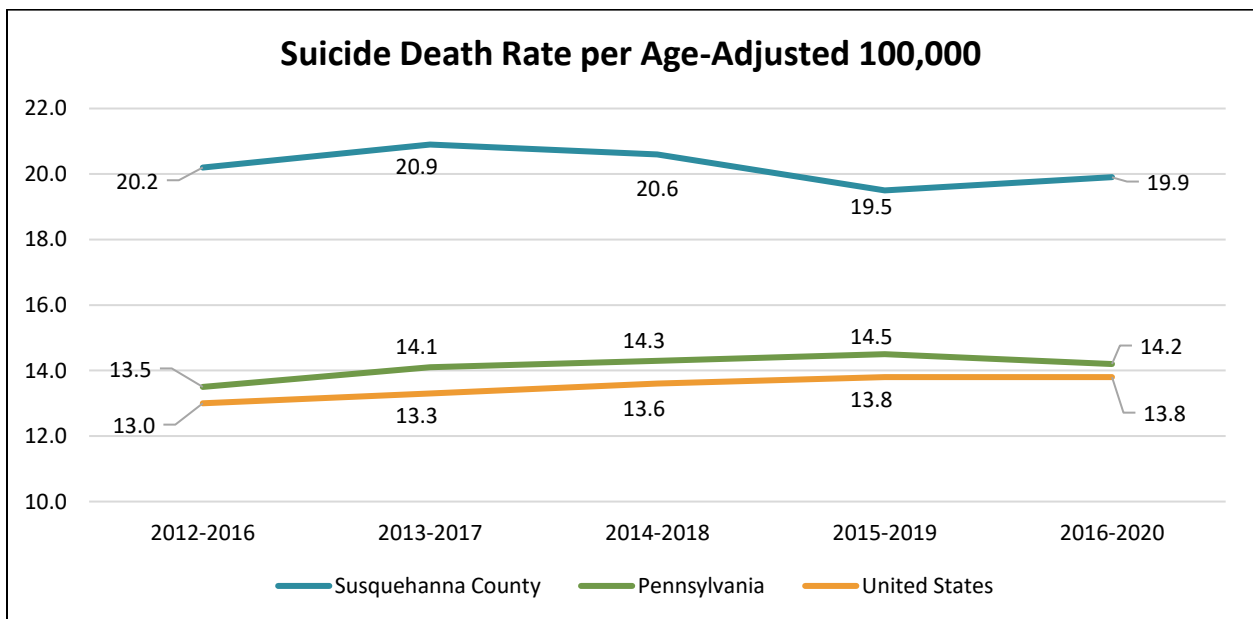


Source: Centers for Medicare and Medicaid Services

### 2019 Age-Adjusted Adult (Age 18+) Poor Mental Health Days

	Average Mentally Unhealthy Days per Month
Susquehanna County	5.1
Pennsylvania	4.6
United States	4.5

Source: Centers for Disease Control and Prevention, BRFSS



Source: Centers for Disease Control and Prevention



Substance use disorder affects a person’s brain and behaviors and leads to an inability to control the use of substances which include alcohol, marijuana, and opioids, among others. Alcohol is the most prevalent addictive substance used among adults.

Consistent with Pennsylvania overall, **Susquehanna County has a higher proportion of adults who report binge drinking than the national average.** Susquehanna County also reports a higher proportion of driving deaths due to alcohol impairment than both the state and the nation.

#### Alcohol Use Disorder Indicators

	2019 Adults Reporting Binge Drinking (age-adjusted)	2015-2019 Driving Deaths due to Alcohol Impairment
Susquehanna County	19.9%	36.0%
Pennsylvania	19.8%	26.2%
United States	17.9%	27.0%

Source: Centers for Disease Control and Prevention, BRFSS

Alcohol is the most prevalent substance among Susquehanna County patients admitted to the hospital for a substance use disorder, followed by opioids. **Susquehanna County has lower rates of hospitalization for all reported substances compared to the state.**

#### 2019 Substance Use Disorder Hospitalizations by Substance

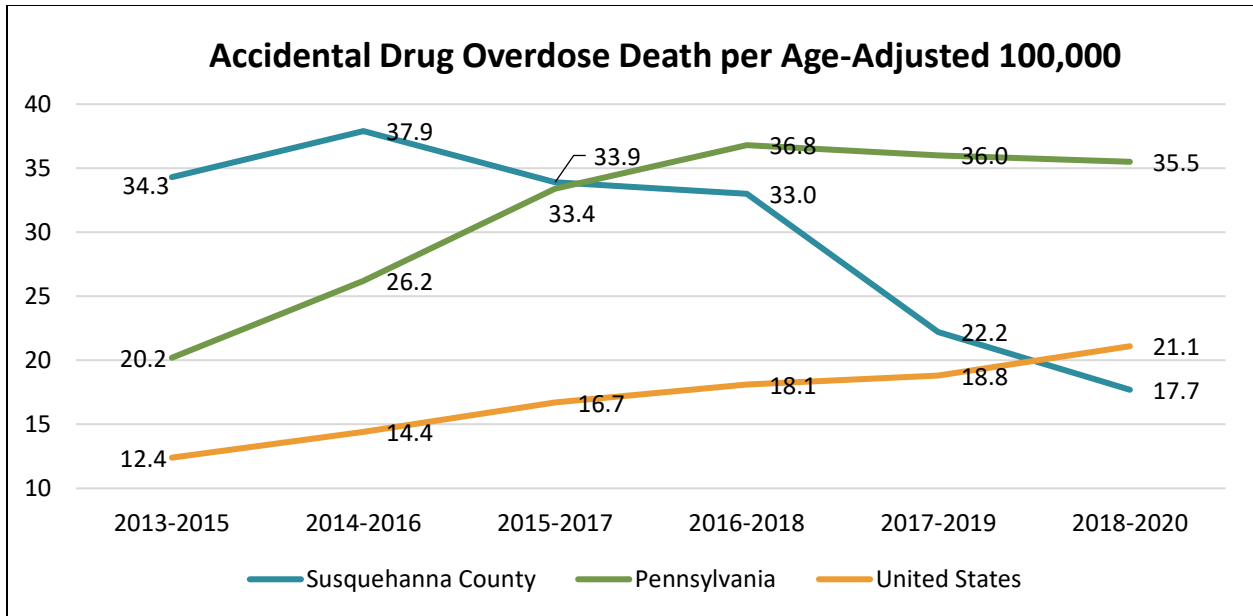
		Alcohol	Opioid	Amphetamine	Cocaine
Susquehanna County	Hospitalizations	71	33	19	NA
	Hospitalizations rate per 100,000	207.3	96.4	55.5	NA
Pennsylvania	Hospitalizations	60,416	31,162	6,770	17,445
	Hospitalizations rate per 100,000	568.4	293.2	63.7	164.1

Source: Pennsylvania Health Care Cost Containment Council (PHC4)

Provisional data released by the CDC predicts that 2020 and 2021 brought the highest number of overdose deaths ever in the US. Pennsylvania has historically had more accidental drug overdose deaths than the nation, although the state saw a smaller increase in 2020 than the US overall. From 2019 to 2020, the number of accidental overdose deaths occurring within Pennsylvania increased nearly 20% from 4,058 to 4,850. Nationally, accidental overdose deaths increased 34% from 2019 to 2020.

**Susquehanna County has historically reported more accidental drug overdose deaths than the state and nation, but contrary to state and national trends, saw a significant decline in deaths in recent years.** The most recent data for the county, reported as a three-year aggregate, indicates the rate of death is approximately half what it was five years ago.

From 2018 to 2020, Susquehanna County experienced 20 accidental drug overdose deaths. Thirteen of the deaths occurred among males. Other demographic factors are not reported due to low counts.



Source: Centers for Disease Control and Prevention

Pennsylvania tracks maternal stays with opioid use and newborn stays with neonatal abstinence syndrome (NAS) as indicators of opioid use prevalence and community impact. Maternal stays include residents aged 12 to 55 years. NAS is defined as an array of withdrawal symptoms that develop soon after birth in newborns exposed to addictive drugs while in the mother’s womb.

From 2017 to 2019, the statewide hospitalization rates for maternal stays with opioid use and newborn stays with NAS declined 2% and 12% respectively. **In Susquehanna County, it is worth noting that while the number of NAS hospital stays is not reportable due to low counts, the 2019 rate was nearly double the statewide average.**

#### 2019 Maternal Opioid Use and Neonatal Abstinence Syndrome (NAS)

	Susquehanna County	Pennsylvania
Maternal hospital stays	NA	2,565
Rate per 1,000 maternal stays	14.8	19.1
NAS hospital stays	NA	1,610
Rate per 1,000 newborn stays	23.2	12.9

Source: Pennsylvania Health Care Cost Containment Council (PHC4)

## Youth Health

### Obesity

Childhood obesity is a persistent and significant threat to the long-term health of today’s youth. The CDC reports that children who have obesity are more likely to have high blood pressure and high cholesterol; glucose intolerance, insulin resistance, and type 2 diabetes; breathing problems like asthma



and sleep apnea; joint and musculoskeletal problems; and psychological and social problems, such as anxiety, depression, low self-esteem, and bullying; among other concerns.

Susquehanna County students have historically higher prevalence of obesity than their peers statewide.

**Of note, while obesity among students in grades K-6 declined in recent years, it increased among students in grades 7-12.**

#### Youth Obesity by School Year

	Susquehanna County	Pennsylvania
<b>Grades K-6</b>		
2017-2018	20.4%	16.8%
2016-2017	20.5%	16.4%
2015-2016	22.1%	16.7%
<b>Grades 7-12</b>		
2017-2018	26.2%	19.5%
2016-2017	25.2%	18.9%
2015-2016	25.3%	19.1%

Source: Pennsylvania Department of Health

#### Mental Health and Substance Use Disorder

Data findings for 2021 indicate that the mental health and well-being of Susquehanna County students was more adversely impacted by the COVID-19 pandemic relative to their peers statewide. **In 2021, approximately half of Susquehanna County students reported feeling consistently sad or depressed, a 6-point increase from 2019 and nearly 10 points higher than the statewide average.** Similarly, the proportion of students who reported an attempted suicide continued to increase in 2021 and was nearly 4 points higher than the statewide average.

#### Students (Grades 6, 8, 10, 12) Feeling Sad or Depressed Most Days in Past Year

	2015	2017	2019	2021
Susquehanna County	40.6%	41.4%	43.9%	50.8%
Pennsylvania	38.3%	38.1%	38.0%	40.1%

Source: Pennsylvania Commission on Crime and Delinquency

#### Students (Grades 6, 8, 10, 12) Reporting an Attempted Suicide in Past Year

	2015	2017	2019	2021
Susquehanna County	9.0%	13.4%	14.0%	14.8%
Pennsylvania	9.5%	10.0%	9.7%	10.9%

Source: Pennsylvania Commission on Crime and Delinquency



**Traditional cigarette use continued to decline among Susquehanna County students, with less than 4% of students reporting use in 2021. Consistent with the state, e-cigarette use also declined in 2021, although it remained higher than the statewide average.** Declines in e-cigarette use in 2021 may reflect pandemic-related impacts and should continue to be explored.

Alcohol is the most commonly used substance among Pennsylvania students. Despite declines in reported use among Susquehanna County students, it remained higher than statewide benchmarks. Students were also slightly more likely to use marijuana than their peers statewide.

**Students (Grades 6, 8, 10, 12) Reporting Cigarette Use within Past 30 Days**

	2015	2017	2019	2021
Susquehanna County	8.7%	8.7%	7.8%	3.9%
Pennsylvania	6.4%	5.6%	3.5%	2.3%

Source: Pennsylvania Commission on Crime and Delinquency

**Students (Grades 6, 8, 10, 12) Reporting E-Cigarette Use within Past 30 Days**

	2015	2017	2019	2021
Susquehanna County	17.4%	19.8%	23.3%	18.7%
Pennsylvania	15.5%	16.3%	19.0%	13.0%

Source: Pennsylvania Commission on Crime and Delinquency

**Students (Grades 6, 8, 10, 12) Reporting Alcohol Use within Past 30 Days**

	2015	2017	2019	2021
Susquehanna County	20.3%	20.3%	19.2%	16.8%
Pennsylvania	18.2%	17.9%	16.8%	13.4%

Source: Pennsylvania Commission on Crime and Delinquency

**Students (Grades 6, 8, 10, 12) Reporting Marijuana Use within Past 30 Days**

	2015	2017	2019	2021
Susquehanna County	8.4%	7.7%	9.5%	8.0%
Pennsylvania	9.4%	9.7%	9.6%	7.0%

Source: Pennsylvania Commission on Crime and Delinquency





## Maternal and Infant Health

The birth rate continued to decline across the nation, Pennsylvania, and Susquehanna County. From the 2019 CHNA, the Susquehanna County birth rate per 1,000 population declined from 18.1 to 17.9. Consistent with racial and ethnic demographics for the county, nearly 96% of births were to White individuals.

**2019 Births and Births by Race and Ethnicity**

	Total Births	Birth Rate per 1,000	White Births	Black/African American Births	Latinx Births
Susquehanna County	359	17.9	95.8%	0.0%	4.2%
Pennsylvania	134,247	20.6	70.1%	13.9%	11.6%
United States	3,747,540	11.4	67.8%	19.4%	23.7%

Source: Centers for Disease Control and Prevention

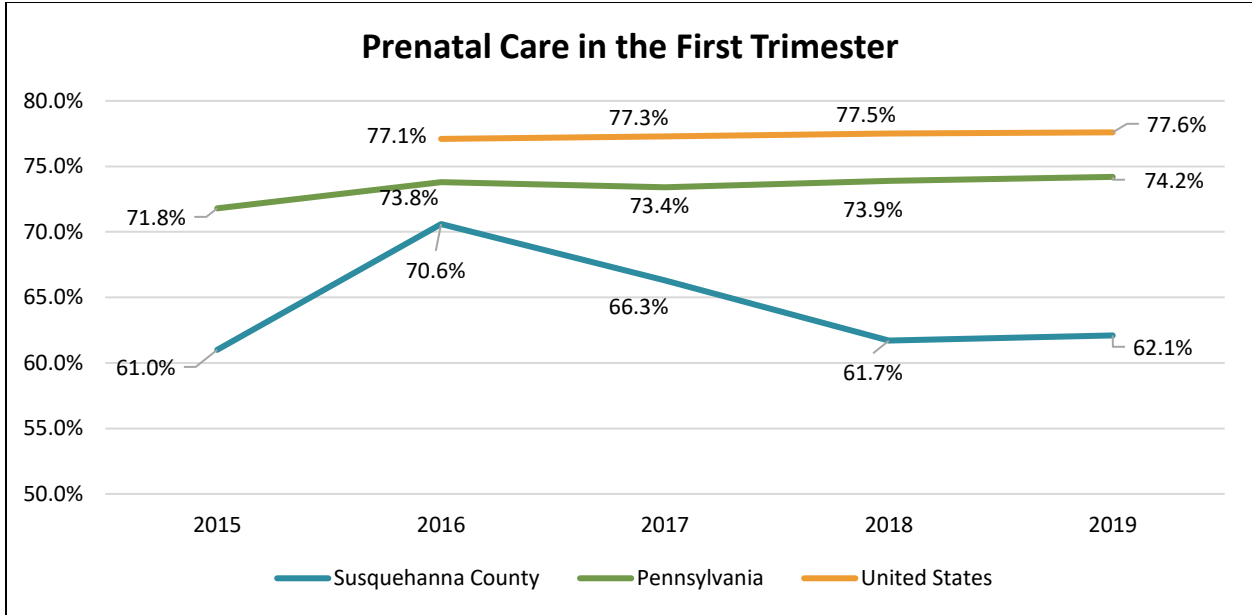
**Consistent maternal and infant health needs in Susquehanna County include access to prenatal care and smoking during pregnancy.** Neither indicator improved from prior years, and both reflect significant disparities relative to the state and nation overall. **Despite these needs, fewer babies in Susquehanna County are born premature and/or with low birth weight compared to the state and nation, and both indicators improved in recent years.** Additionally, the county has a historically low infant death rate.

Maternal and infant health indicators are not presented by race and ethnicity for Susquehanna County due to low birth counts. Statewide and nationally, people of color, particularly Black/African Americans, experience disparate outcomes relative to White individuals living in the same community. In Pennsylvania, these disparities include a more than 10-point difference in access to prenatal care and significant differences in premature and low birth weight births. These disparities are also reflected in infant and maternal death rates. Statewide, the infant death rate is nearly three times higher for Black/African Americans than Whites.

**2019 Maternal and Infant Health Indicators by Race and Ethnicity**

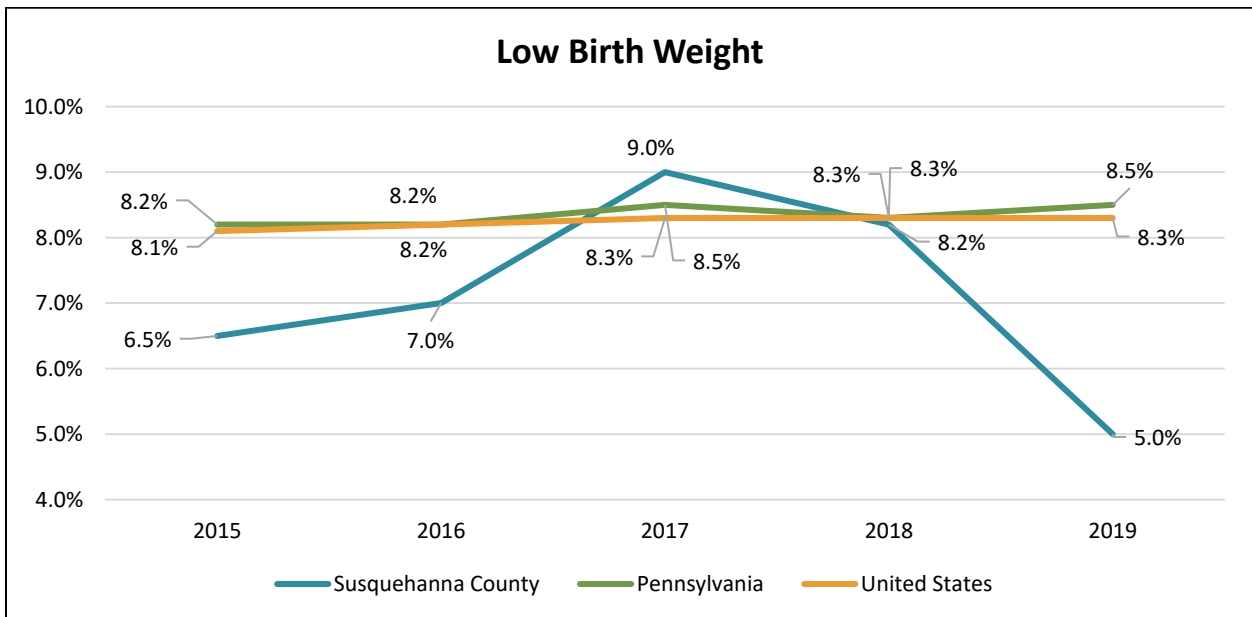
	Teen (15-19) Births	First Trimester Prenatal Care	Premature Births	Low Birth Weight Births	Non-Smoking during Pregnancy
Susquehanna County	3.6%	62.1%	7.6%	5.0%	78.2%
Pennsylvania	3.9%	74.2%	9.9%	8.5%	90.5%
White	2.8%	77.4%	9.1%	7.0%	89.1%
Black/African American	6.8%	63.8%	13.8%	14.4%	92.5%
Latinx (any origin)	8.9%	65.6%	10.5%	9.1%	94.9%
United States	4.6%	77.6%	10.2%	8.3%	94.0%
White	2.4%	82.8%	9.3%	6.9%	91.2%
Black/African American	1.3%	67.6%	14.4%	14.2%	95.2%
Latinx (any origin)	7.1%	72.1%	10.0%	7.6%	98.5%
HP2030 Goal	NA	80.5%	9.4%	NA	95.7%

Source: Centers for Disease Control and Prevention

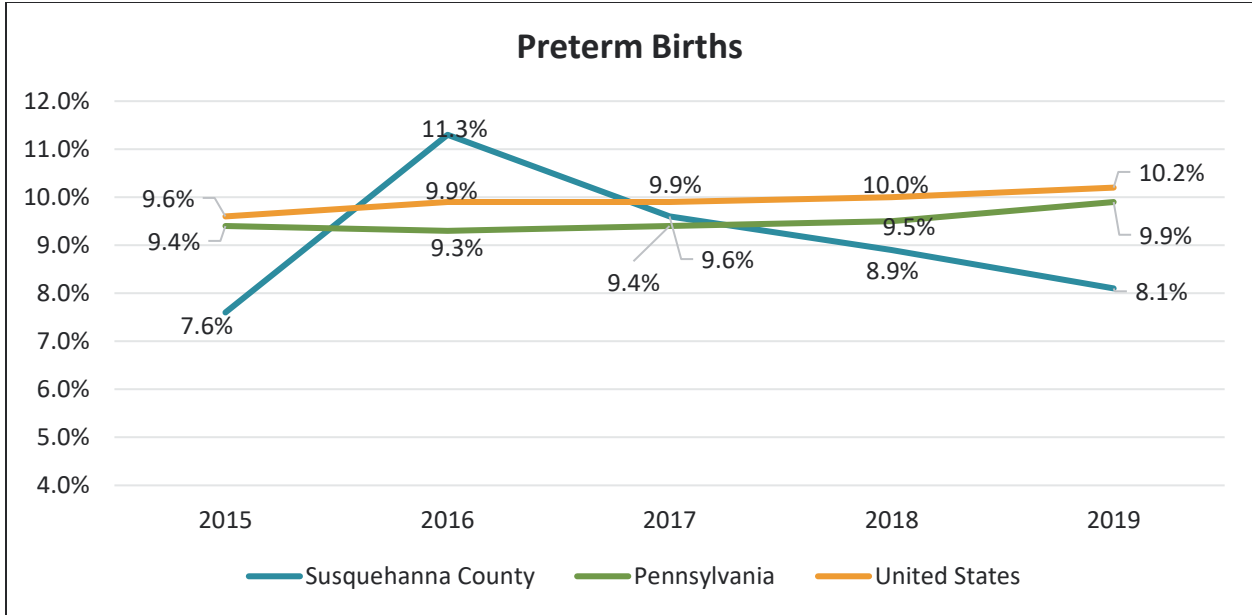


Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention

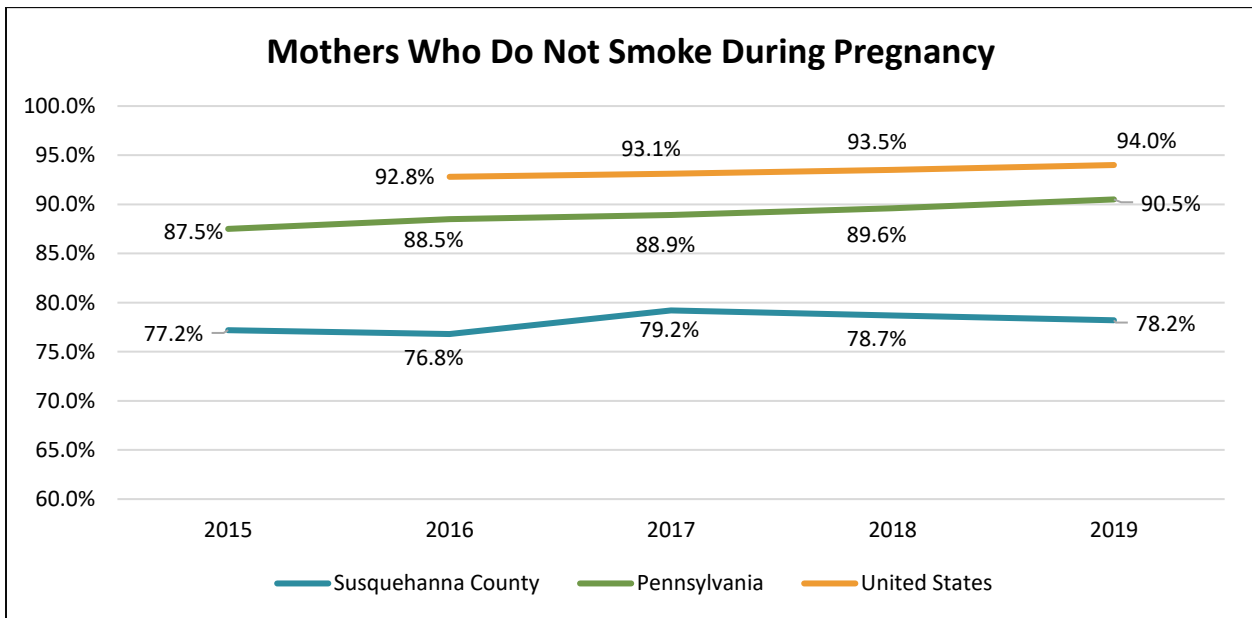
\*In 2016, the US universally adopted the 2003 US Certificate of Live Birth, providing national indicators.



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention

\*In 2016, the US universally adopted the 2003 US Certificate of Live Birth, providing national indicators.



### 2016-2020 Infant Death per 1,000 Live Births

	Infant Deaths
Susquehanna County	5.5 (n=10)
Pennsylvania	5.9 (n=4,012)
White	4.6
Black/African American	13.0
Latinx (any origin)	6.5
HP2030 Goal	5.0

Source: Pennsylvania Department of Health

Pregnancy-associated mortality ratios (PAMR) estimate the number of pregnancy-associated deaths for every 100,000 live births. The ratio is often used as an indicator of the health of the population at large since factors that affect the health of the entire population can also affect mortality among pregnant and postpartum individuals. Additionally, PAMRs depict how maternal mortality affects different populations. The PAMR for Pennsylvania in 2018 was 82 deaths per 100,000 live births. Non-Hispanic Blacks had the highest PAMR, which was two times higher than the PAMR for non-Hispanic Whites.

### 2018 Pennsylvania Pregnancy-Associated Mortality Ratio per 100,000 Live Births by Race and Ethnicity

All Live Births	Non-Hispanic White	Non-Hispanic Black/African American	Latinx	Non-Hispanic Other Race
82	79	163	70	29

Source: Pennsylvania Department of Health



# Key Stakeholder Survey

## Background

An online Key Stakeholder Survey was conducted with community representatives of Susquehanna County to solicit information about local health needs and opportunities for improvement. Community representatives included healthcare and social service providers; public health experts; civic, social, and faith-based organizations; policy makers and elected officials; and others representing diverse community populations.

A total of 15 individuals responded to the survey. A list of the represented community organizations and the participants' respective titles is included in Appendix B.

Approximately 60% of stakeholders served Susquehanna County. Other geographies served by stakeholders included local school districts (e.g., Blue Ridge, Montrose, Susquehanna Community), neighboring counties (e.g., Bradford, Sullivan, Tioga, Wayne, Wyoming), and select townships in Susquehanna County (e.g., Meshoppen). More than half of stakeholders served all populations. Among stakeholders who served specific population groups, the most served populations were adolescents, children, and/or people or families with low incomes or in poverty.

**Primary Populations Served by Key Stakeholder Survey Participants**

	Number of Participants	Percent of Total
No specific focus-serve all populations	8	53.3%
Adolescents (age 12-18)	8	53.3%
Children (age 0-11)	6	40.0%
People or families with low incomes or in poverty	5	33.3%
People with disabilities	4	26.7%
Older adults/Seniors	2	13.3%
People or families experiencing homelessness	2	13.3%
People who are uninsured or underinsured	2	13.3%
African American/Black	1	6.7%
American Indian/Alaska Native	1	6.7%
Asian/South Asian	1	6.7%
Caucasian/White	1	6.7%
Pacific Islander/Native Hawaiian	1	6.7%
Hispanic/Latinx	1	6.7%
LGBTQ+ community	1	6.7%
New Americans/Immigrants/Refugees	1	6.7%
Pregnant or postpartum people	1	6.7%
Young adults (age 19-24)	1	6.7%

Key stakeholders were asked a series of questions about perceived health priorities, perspectives on emerging health trends, including COVID-19, and recommendations to advance community health improvement strategies. A summary of their responses follows.



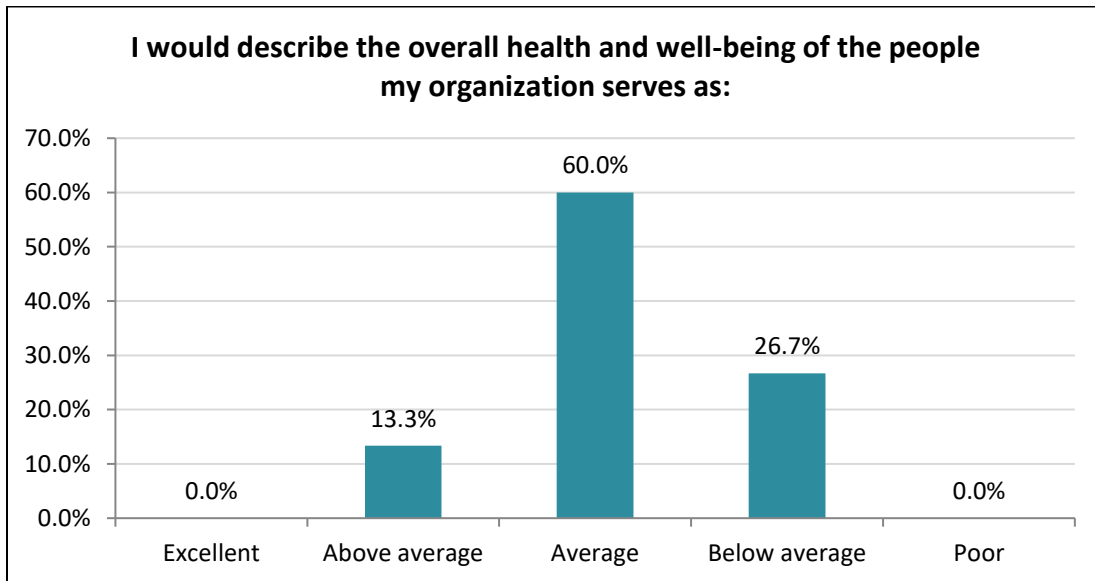
## Survey Findings

### Health and Quality of Life

Thinking about the people their organization serves, key stakeholders were asked to describe the overall health and well-being of individuals and the most pressing concerns affecting them. Key stakeholders rank ordered up to five concerns, selecting from a wide-ranging list of options. An option to “write in” any concern not included on the list was provided.

Approximately 60% of stakeholders described overall health and well-being as “average” and 27% described it as “below average,” indicating widespread perceptions of opportunity for health improvement.

When asked to identify the top five most pressing concerns affecting the people their organization serves, more than half of key stakeholders selected mental health conditions and two-thirds selected behavioral health treatment. This finding indicates consistent perceptions of health needs within the community. Other top identified concerns were ability to afford healthcare and housing (affordable, quality), selected by 40% and 33% of stakeholders, respectively. It is worth noting that key stakeholders were generally divided in their perceptions of the top #1 concern for the community.







**What are the most pressing concerns among people that your organization serves?  
Top Key Stakeholder Selections.**

	Selected as #1 Concern		Selected as a Top 5 Concern	
	Number of Participants	Percent of Total	Number of Participants	Percent of Total
Mental health conditions	4	26.7%	8	53.3%
Ability to afford healthcare	2	13.3%	6	40.0%
Behavioral health treatment	2	13.3%	10	66.7%
Economic stability (employment, poverty, cost of living)	2	13.3%	4	26.7%
Substance use disorder (dependence/misuse of opiates, heroin, etc.)	2	13.3%	4	26.7%
Child/Adolescent health concerns	1	6.7%	3	20.0%
Education attainment	1	6.7%	2	13.3%
Limited healthcare providers	1	6.7%	4	26.7%
Housing (affordable, quality)	0	0.0%	5	33.3%
Trauma	0	0.0%	4	26.7%
Health literacy	0	0.0%	3	20.0%
Stress (work, family, school, etc.)	0	0.0%	3	20.0%

In a follow-up question, key stakeholders were asked to provide open-ended feedback on what the community needs to do differently to address the most pressing concerns they identified. Consistent themes addressed access to care barriers, including local service availability and mental healthcare. Verbatim comments by stakeholders are included below.

- *“Add more mental health providers.”*
- *“Educate parents on making healthier lifestyle choices. More movement - less screen time.”*
- *“Education on available services to reach the isolated rural population.”*
- *“Hygienists back in schools, dental programs in school settings.”*
- *“Offer additional services and specialties.”*
- *“Provide access to consistent and reliable mental health services. This would include outpatient, partial and residential options when necessary.”*
- *“Services and resources to support mental health needs.”*
- *“There are limited resources in general that prevent access to medical care within the county. Transportation may be a challenge, but when there are no facilities for dialysis, cancer treatments, etc... even when there are facilities in neighboring counties, there are limitations to availability and appointment times. Facilities are closing, combining offices, and offering less services locally.”*
- *“This problem is a national problem that requires systemic change in all being able to access and/or afford healthcare.”*
- *“Treatment.”*



- *“We need more mental health providers in our county. There has always seemed to be quite a bit of cancer in Northeast Pa. in my opinion. Many people are complaining about a lack of affordable housing in the county. People are carrying quite a bit of stress right now with the high cost of gasoline and groceries, and everything else. I know people are worrying about buying groceries and fuel this winter, and medications. This will be a huge issue for our senior citizens.”*
- *“Your organization is already addressing many of these issues...”*

### **Social Determinants of Health**

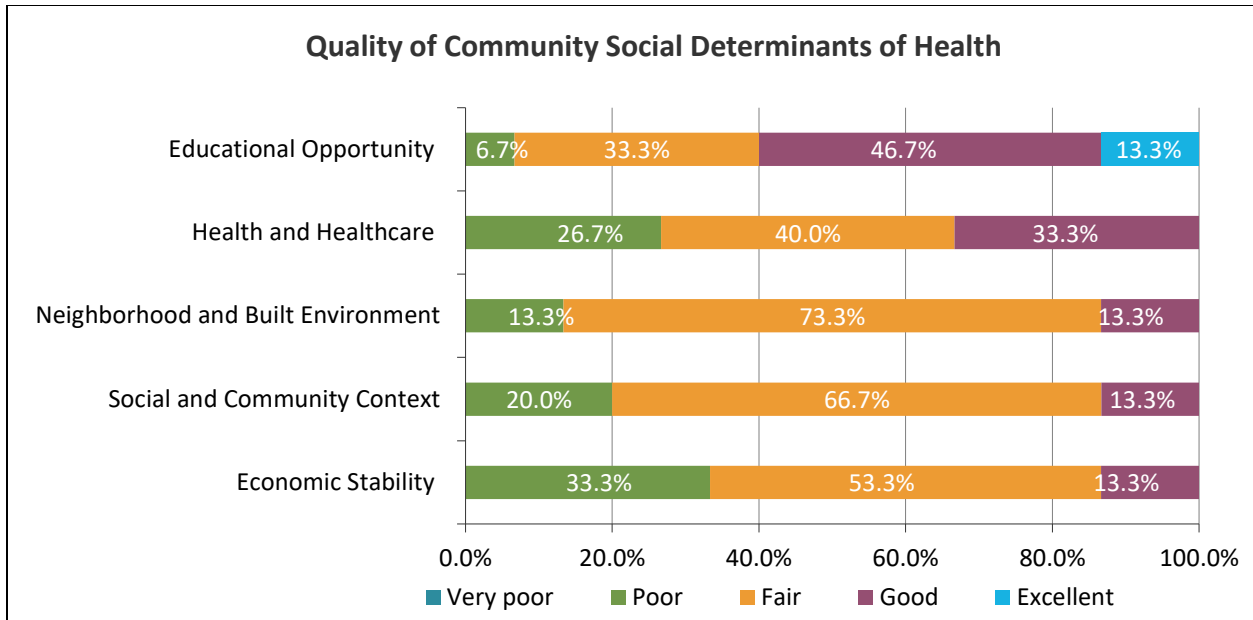
Key stakeholders were asked to rate the quality of the social determinants of health (SDoH) within the community their organization serves, focusing on the five key domains identified by Healthy People 2030: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context. Ratings were provided using a scale of (1) “very poor” to (5) “excellent.”

The mean score for each SDoH domain is listed in the table below in rank order, followed by a graph showing the scoring frequency. Educational opportunity was seen as the strongest community SDoH with 60% of stakeholders rating it as “good” or “excellent.” Economic stability was seen as the weakest SDoH, with 53% rating it as “fair” and 33% rating it as “poor.”

Approximately 80% (n= 12) of stakeholders stated that their organization currently screens the people their organization serves for the needs related to SDoH.

**Ranking of Social Determinants of Health in Descending Order by Mean Score**

	<b>Mean Score</b>
Educational Opportunity (Consider high school graduation, enrollment in higher education, language and literacy, early childhood education and development)	3.67
Health and Healthcare (Consider access to healthcare, access to primary care, health literacy)	3.07
Neighborhood and Built Environment (Consider access to healthy foods, quality of housing, crime and violence, environmental conditions, transportation)	3.00
Social and Community Context (Consider social cohesion, civic participation, perceptions of discrimination and equity, incarceration/institutionalization)	2.93
Economic Stability (Consider poverty, employment, food security, housing stability)	2.80



Key stakeholders were invited to provide open-ended feedback on SDoH within the community and examples of how they impact resident health. Verbatim comments are included below.

- *“Lack of social services within the county.”*
- *“Most listed above are grouped together, some is poor, some better than others, so it is hard to say. Examples: We have a range of food banks, would like to see healthier choices in public schools. There is housing available, but no shelters. We have transportation available, but limited doctors and medical availability to transport to and limited appointments for out of county.”*
- *“Our population as a whole does not value health and well-being, this leads to poor diet and activity which leads to poor health.”*
- *“We need translators available or language courses offered to break barriers.”*

### COVID-19 Insights and Perspectives

COVID-19 had a significant impact on key stakeholder organizations. Approximately 60% “agreed” or “strongly agreed” that more people needed their organization’s services since the pandemic.

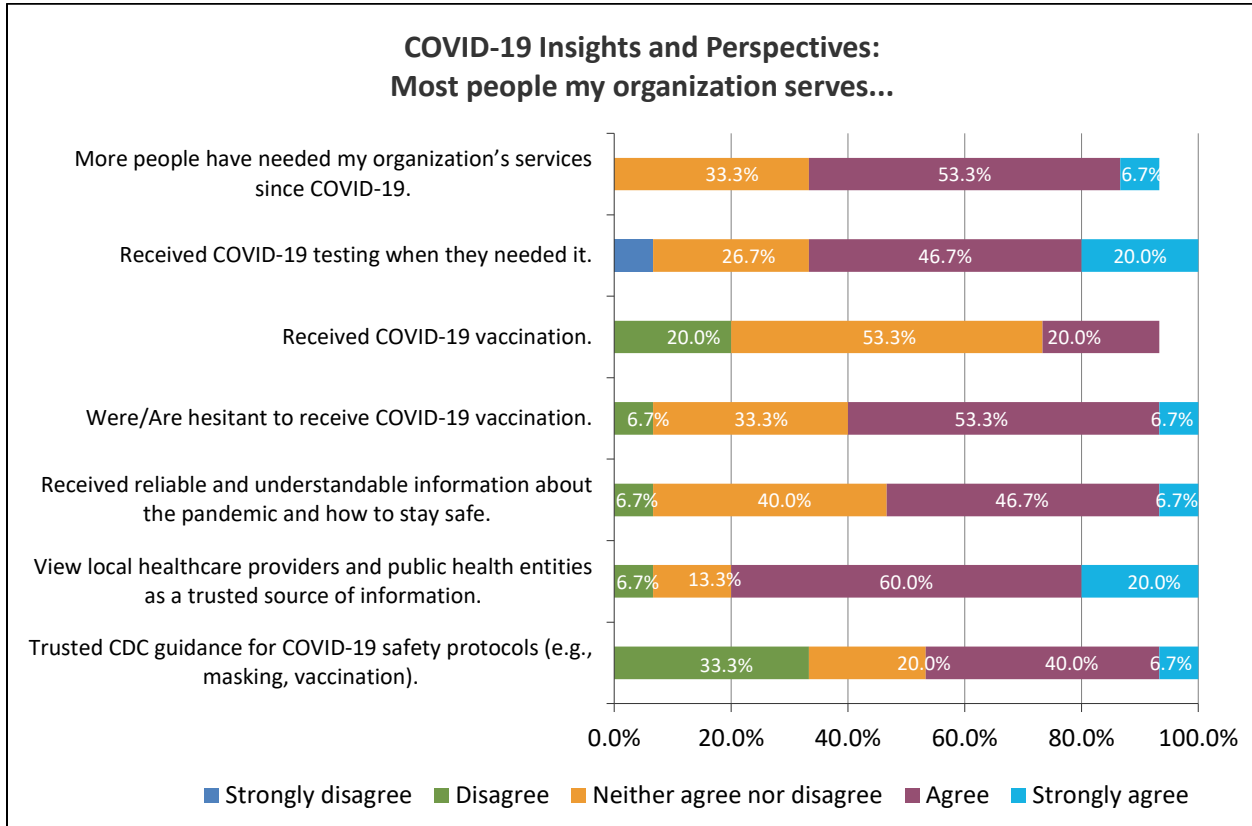
Thinking about the people their organization serves, key stakeholders were asked to rate their level of agreement with a variety of statements about COVID-19, including availability of testing, vaccination, and reliable information; susceptibility to misinformation; and likeliness to follow recommended safety protocols. Their responses are shown in the graph below.

The majority of key stakeholders “agreed” or “strongly agreed” that the people their organization serves received COVID-19 testing when needed, but stakeholders were divided in their opinions on receipt of vaccination and reliable information. Approximately half of stakeholders “neither agreed nor disagreed”



that the people their organization serves received vaccination and/or reliable information about the pandemic, and more than half stated individuals were/are hesitant to receive COVID-19 vaccination.

While there was overall strong perceived trust in local healthcare providers and public health entities as sources for COVID-19 information, less than half of stakeholders “agreed” or “strongly agreed” that individuals trusted CDC guidance for COVID-19 safety protocols. The top perceived sources for trusted COVID-19 information among constituents varied widely, with the largest proportion of stakeholders selecting “Their family doctor.”



**What were the most trusted sources of information about COVID-19 among the people your organization serves? Top Key Stakeholder Selections.**

	Selected as #1 Source		Selected as a Top 3 Source	
	Number of Participants	Percent of Total	Number of Participants	Percent of Total
Their family doctor	5	33.3%	10	66.7%
Centers for Disease Control and Prevention (CDC)	3	20.0%	7	46.7%
Social media	2	13.3%	3	20.0%
Local or state health departments	1	6.7%	5	33.3%
Friends/Family	1	6.7%	4	26.7%



Key stakeholders were asked to share recommendations for how communication about COVID-19 could have been improved for the populations their organization serves. Consistent recommendations addressed the need to de-politicize COVID-related information and build trust in science-based information. Verbatim comments by stakeholders are included below.

- *“Consistent communication in general.”*
- *“Eliminate inaccurate information on social media.”*
- *“Majority of low-income older adults can't afford the local newspaper or don't have access to a computer. Radio may be a good source of information.”*
- *“More communication and facts in the beginning. But it was an experience like no other for many people and I guess the medical field was doing the best they could do under the circumstances. But I think the whole pandemic was handled improperly.”*
- *“More scientific based information and less politics.”*
- *“No one seems to trust the government.”*
- *“Remove the political rhetoric and politics from science. Messaging from CDC and DOH was politicized for their intended purposes rather than focus on the actual science and scientific studies.”*
- *“This is difficult to answer based on the politicization of the pandemic and subsequent irrational response by individuals who felt their rights were being infringed upon.”*
- *“Unfortunately, the communication individuals received was self-interpreted according to their political beliefs instead of the science behind the communications.”*

### **Community Resources to Impact Health**

Key stakeholders were asked to identify resources or services that are needed within the community to improve health and quality of life for residents. Stakeholders rank ordered up to three free-form responses with #1 as the top missing resource or service. The following table summarizes the top identified needs by category and number of mentions by participants.

Mental health services were the top identified needed community resource by key stakeholders. In addition to general mental health services (n=4), stakeholders identified the need for counselors (n=3), in-home assessments (n=1), and crisis services (n=1). Other top needed community resources addressed general access to care barriers, including the need for more healthcare providers, affordability, and localized care.

Other resource or service gaps identified by two or fewer key stakeholders included educational opportunities, affordable housing, dental care, drug and alcohol rehab, social services, healthy community programming for all ages, family resources, local guardianship agency, self-sustaining occupations, translators, transportation, and walk-in clinics.



**What resources or services are needed within the communities your organization serves to improve health and quality of life for residents? Top Key Stakeholder Mentions.**

Community Resources or Services	Number of Mentions as #1 Need	Total Number of Mentions
Mental health services	5	9
More healthcare providers	2	4
Better overall access to care (e.g., affordable)	2	2
Localized or in-home care services (e.g., “Bringing care to them” or “Direct care workers”)	0	3

**Community Health Improvement Recommendations**

Substance use disorder has historically been a health need for Susquehanna County. Key stakeholders were asked to provide feedback on how this need changed in light of the pandemic and how the community can better serve affected residents. Feedback acknowledged higher substance use disorder among residents due to the pandemic, new concerns among youth (e.g., vaping), and the need to promote available services and early prevention efforts. Verbatim comments are included below.

- *“I believe the need has increased. The items listed in #14 (community resources to impact health) would positively effect affected residents.”*
- *“Individuals who were once stable and considered high functioning are now struggling with substance use issues and families don't know how to address this. We must market a no wrong door message to the community so that they know they can access treatment / support through EMHS or through their school district (for example).”*
- *“Increase in need for these services due to the pandemic. Education on available services to promote greater awareness of available services.”*
- *“Increased cases, but limited availability for residents of our community.”*
- *“They all have money for drugs, tobacco and cell phones but no money for the family bills or housing.”*
- *“This need has not changed. It has been and continues to be a problem in the rural areas.”*
- *“Vaping has become a significant problem with the population we serve.”*
- *“Vaping is extremely popular among the county's youth. More educational programming needs to occur related to this issue.”*
- *“We need to reach the children and young people. Starting earlier in the schools with education about how to handle stress and making healthy choices. The DARE program is a wonderful tool for that. Having mental health professionals available to students. Education and awareness, teaching young people to respect and care for their minds and bodies could be helpful.”*



Lastly, key stakeholders were asked how local health and human service organizations, including EMHS, can improve health and well-being for residents. Stakeholders were invited to provide free-form comments about the topic. Verbatim comments are included below.

- *“Coalitions. I have been on a coalition with EMHS and found it very beneficial.”*
- *“Education and awareness, providing good medical options and good doctors so people don't have to travel so far for specialized medical attention.”*
- *“Local referrals, increased communication, written materials with information for residents.”*
- *“Meetings between health and human service organizations to share information on available services to reduce potential duplication of services and generate a better understanding of the resources available in the county.”*
- *“Outpatient counseling, counseling access to students.”*
- *“Programs that support affordable healthcare.”*
- *“Somehow, someday motivate people to live healthy lifestyles.”*
- *“Utilize schools as satellite healthcare centers to provide common services to school age populations.”*
- *“We’re making a positive impact on those who want it. I don’t think anything we do can change their responsibility and force them.”*



# Evaluation of Health Impact: 2019-2022 Community Health Improvement Plan Progress

In 2019, EMHS completed a CHNA and developed a supporting three-year Implementation Plan for community health improvement. The Implementation Plan outlined our strategies for measurable impact on identified priority health needs, including Access to Healthcare and Health Risk Factors and Chronic Disease. Within six months of the release of the 2019 Implementation Plan, the COVID-19 pandemic shifted the priorities of our community and EMHS adapted our work to respond to the emergent needs of residents. The following sections outline our work to impact the priority health needs and respond to COVID-19 in our communities.

## Priority – Access to Healthcare

Strategies implemented by EMHS addressed the overarching goal to improve access to quality, preventive healthcare services. As part of the 2019-2022 Implementation Plan, EMHS conducted the following programs and initiatives:

- ▶ Ongoing participation in the Pennsylvania Rural Health Model to increase access to high-quality hospital services and improve population health in underserved rural communities
- ▶ Recruitment of primary care providers, and partnership with area healthcare providers to address specialty care delivery gaps
- ▶ Implementation of telehealth services to address pandemic-related access to care barriers
- ▶ Partnership with community-based behavioral health providers to facilitate service referrals and provide onsite, direct care services
- ▶ Expansion of drug and alcohol addiction treatment with the opening of a new treatment center at the New Milford Office
- ▶ Counseling and enrollment assistance for individuals without health insurance

## Program and Strategy Highlights:

The Pennsylvania Rural Health Model (PARHM) seeks to stabilize all participating hospitals' finances by providing a predictable revenue stream through global budgets, and to support all participating hospitals in identifying and implementing activities to transform care delivery by investing in prevention, quality improvement, and community-based services. The PARHM aims to improve quality of care, achieve population health outcome goals, and advance health equity in rural communities.

An evaluation of the PARHM for 2019-2020 found that participating hospital transformation plans addressed rural health disparities and high costs through robust chronic disease management, improved care coordination, and reduction in potentially avoidable utilization. Hospitals made progress on transformation activities, including providing patient and staff education, assessing patient social needs, developing registries of high-risk patients, and implementing new post-discharge follow-up processes.





From 2020 to 2022, EMHS recruited one primary care provider to the area. The hospital is currently exploring grant opportunities and partnerships with other area healthcare providers to address the shortage of maternal health services. Additionally, EMHS successfully implemented telehealth services during the pandemic, providing 420 visits at the height of the pandemic in June 2020. The hospital anticipates maintaining telehealth services to provide additional care options for residents.

Endless Mountains Health Systems continued to partner with community-based behavioral health providers for crisis services and to facilitate warm handoff referrals for patients seen in the emergency department for a behavioral health concern. NEPA Community Health Care and Scranton Counseling Center provide onsite psychiatric consultations and referrals for additional services. EMHS also opened a Drug and Alcohol Addiction Treatment Center at its New Milford Office, offering medication assisted treatment (MAT) and referrals for community-level social supports.

### Priority – Health Risk Factors & Chronic Disease

Strategies implemented by EMHS addressed the overarching goal to reduce health disparities and improve health outcomes through chronic disease management and prevention services. As part of the 2019-2022 Implementation Plan, EMHS conducted the following programs and initiatives:

- ▶ Provision of diabetes self-management education and nutrition counseling, free of charge
- ▶ Support and staffing for a monthly food distribution for community members experiencing food insecurity
- ▶ Screening and referral for social determinants of health needs for patients
- ▶ Implementation of the Endless Weighs to Health program for community-based healthy lifestyle education
- ▶ Implementation of Walk with a Doc, pairing discussions on timely health topics and wellness walks
- ▶ Implementation of a COPD management program to improve patient health outcomes and reduce avoidable hospital utilization
- ▶ Support and sponsorship for community-based presentations and events to promote community wellness

### Program and Strategy Highlights:

Endless Mountains Health Systems has provided diabetes self-management education and nutrition counseling to patients and community members at no charge since 2014. The program is aimed at empowering patients to expertly manage their own diabetes care to improve quality of life. Core education concepts include disease process, glucose monitoring and goals, medication administration, identifying and treating hyperglycemia and hypoglycemia, sick day management, foot care, and carbohydrate counting. Counseling is provided at the patient's pace and directed by the patient's needs, with individualization of goals. The program is overseen by a joint collaboration of nursing staff and a registered dietitian/certified diabetes educator.



Food insecurity has historically affected more Susquehanna County residents, particularly children. These concerns were exacerbated during the pandemic due to financial strain and high unemployment experienced by community members. Endless Mountains Health Systems supports and staffs a food distribution at the hospital on the fourth Friday of every month. At the height of the pandemic, the food pantry served 240 Susquehanna County families.

Endless Mountains Health Systems conducts social determinants of health screenings for patients. Patients with identified needs are connected with the United Way of Susquehanna County's 2-1-1 program, a 24/7 hotline for health and human service assistance.

Endless Mountains Health Systems implemented the "Endless Weighs to Health" program and "Walk with a Doc" to provide community-based healthy lifestyle education. Endless Weighs to Health is a 10-week program, led by the hospital's registered dietitian/certified diabetes educator. The program teaches better nutrition and physical activity as a starting point for better health, while providing tools for healthy lifestyle behavior change. Walk with a Doc, offered in partnership with Geisinger Health Plan, kicked off in April 2019. The walks are led by different EMHS physicians and address different health topic areas, such as diet/cholesterol, pre-diabetes, child/adult obesity, and vaccines.

Susquehanna County residents are more likely to use tobacco products and to experience respiratory conditions, including COPD. The COPD management program at EMHS provides care management services, including medication adherence support and patient education, including smoking cessation classes. While tobacco use continues to be a challenge for the community, deaths due to chronic lower respiratory disease have declined.

### COVID-19 Response

Endless Mountains Health Systems has supported the community throughout the pandemic, providing education and supporting community-wide efforts for screening and vaccination. The following is a list of services provided by the hospital in response to COVID-19:

- ▶ Support and staffing for community vaccination sites, vaccinating more than 1,000 residents
- ▶ COVID-19 drive-thru testing services at EMHS and in partnership with the Pennsylvania Department of Health
- ▶ Development and provision of virtual health education materials in partnership with community agencies

Endless Mountains Health Systems welcomes your partnership to meet the health and medical needs of our community. We know we cannot do this work alone and that sustained, meaningful health improvement will require collaboration to bring the best that each of community organizations has to offer. To learn more about EMHS's community health improvement work or to discuss partnership opportunities, please visit our website at: [endlesscare.org](https://endlesscare.org).



## 2022-2025 Community Health Improvement Plan

Endless Mountains Health Systems developed a three-year Community Health Improvement Plan (CHIP) to guide community benefit and population health improvement activities across Susquehanna County. The CHIP builds upon previous health improvement activities, while recognizing new health needs identified in the 2022 CHNA, a changing healthcare environment, and the myriad impacts of the COVID-19 pandemic.

The intent of the CHIP is to be responsive to community needs and expectations and create a plan that can be effectively executed to leverage hospital resources, as well as community partners. The 2022-2025 CHIP will address the priority areas of **Diabetes and Obesity and Mental Well-Being**. Strategies and initiatives to address these areas will target access to care barriers as a cross-cutting issue, as well as needs among populations placed at risk, including older adults and youth.

### Priority Area: Diabetes and Obesity

**Goal:** Increase early detection of diabetes and obesity and promote evidence-based care to prevent and manage these conditions.

Objectives	Initiatives
Increase access to chronic disease education and health promotion, and participation among populations placed at risk.	<ul style="list-style-type: none"> <li>• Provide the Endless Weighs to Health program for community-based healthy lifestyle education</li> <li>• Provide Walk with a Doc, pairing discussions on timely health topics and wellness walks</li> <li>• Support and sponsor community-based presentations and events to promote wellness</li> <li>• Explore partnerships with schools and senior service providers to reach populations placed at risk</li> </ul>
Increase access to traditional and alternative (community- and technology-based) places people can access healthcare.	<ul style="list-style-type: none"> <li>• Offer and/or expand telehealth for primary and specialty care and increase digital equity to access services (patient device access and know-how)</li> <li>• Continue recruitment efforts for primary care providers</li> <li>• Partner with area healthcare providers to identify and address specialty care delivery gaps</li> </ul>
Increase food security among residents.	<ul style="list-style-type: none"> <li>• Provide a monthly mobile food pantry</li> <li>• Conduct social determinants of health screenings among patients, and facilitate referrals to United Way 2-1-1 and/or area social service providers</li> </ul>



Objectives	Initiatives
<p>Improve care management and coordination for individuals with diabetes.</p>	<ul style="list-style-type: none"> <li>• Participate in the Pennsylvania Rural Health Model to provide patient and staff education, better care for patients with social needs and other risk factors, and implement post-discharge processes for care management</li> <li>• Train nursing staff on the most current evidence-based diabetes treatment practices</li> </ul>
<p>Improve self-management skills for individuals with obesity and/or diabetes.</p>	<ul style="list-style-type: none"> <li>• Offer free monthly diabetes management class led by a Certified Diabetes Educator</li> <li>• Provide nutrition counseling and science-based weight management classes</li> </ul>

### Priority Area: Mental Well-Being

**Goal:** Strengthen opportunities to build well-being across the lifespan.

Objectives	Initiatives
<p>Increase participation in mental health and wellness activities, targeting populations placed at risk.</p>	<ul style="list-style-type: none"> <li>• Support and sponsor community-based presentations and events to promote wellness</li> <li>• Support school initiatives to provide engagement and enrichment activities, and to develop solutions for youth mental health services</li> <li>• Explore partnerships with senior service providers to support social engagement opportunities and connect older adult patients with available services</li> </ul>
<p>Increase access to traditional and alternative (community- and technology-based) places people can access mental healthcare.</p>	<ul style="list-style-type: none"> <li>• Partner with community-based providers for crisis services and warm handoff referrals for patients seen in the ED</li> <li>• Provide onsite psychiatric consultations in partnership with community-based providers</li> <li>• Explore telehealth services for mental healthcare</li> <li>• Conduct social determinants of health screenings among patients, and facilitate referrals to United Way 2-1-1 and/or area social service providers</li> </ul>
<p>Increase access to treatment services for co-occurring substance use disorders.</p>	<ul style="list-style-type: none"> <li>• Provide a Drug and Alcohol Addiction Treatment Center, offering medication assisted treatment and referrals for community-level social supports</li> <li>• Provide a Certified Peer Recovery Specialist embedded in the ED to support individuals with substance use disorder</li> <li>• Provide adult tobacco cessation classes</li> <li>• Refer patients to PA Free Quitline for free tobacco cessation services and Nicotine Replacement Therapy</li> </ul>



## Appendix A: Public Health Secondary Data References

- Center for Applied Research and Engagement Systems. (2021). *Map room*. Retrieved from <https://careshq.org/map-rooms/>
- Centers for Disease Control and Prevention. (n.d.). *BRFSS prevalence & trends data*. Retrieved from <http://www.cdc.gov/brfss/brfssprevalence/index.html>
- Centers for Disease Control and Prevention. (2020). *CDC wonder*. Retrieved from <http://wonder.cdc.gov/>
- Centers for Disease Control and Prevention. (2019). *Diabetes data and statistics*. Retrieved from <https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html>
- Centers for Disease Control and Prevention. (2021). *National vital statistics system*. Retrieved from <https://www.cdc.gov/nchs/nvss/index.htm>
- Centers for Disease Control and Prevention. (2021). *PLACES: Local data for better health*. Retrieved from <https://www.cdc.gov/places/>
- Centers for Disease Control and Prevention. (2021). *United States cancer statistics: data visualizations*. Retrieved from <https://gis.cdc.gov/Cancer/USCS/#/StateCounty/>
- Centers for Medicare & Medicaid Services. (2021). *Chronic conditions*. Retrieved from [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC\\_Main.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main.html)
- Corporation for Supportive Housing. (2020). *Racial disparities and disproportionality index*. Retrieved from <https://www.csh.org/supportive-housing-101/data/#RDDI>
- County Health Rankings & Roadmaps. (2022). *Rankings data*. Retrieved from <http://www.countyhealthrankings.org/>
- Covid Act Now. (2021). *US covid risk & vaccine tracker*. Retrieved from <https://covidactnow.org>
- Dignity Health. (2021). *Community need index*. Retrieved from <http://cni.dignityhealth.org/>
- Feeding America. (2022). *Food insecurity in the United States*. Retrieved from <https://map.feedingamerica.org/>
- Health Resources and Service Administration. (2021). *HPSA find*. Retrieved from <https://data.hrsa.gov/tools/shortage-area/hpsa-find>
- Pennsylvania Commission on Crime and Delinquency. (2019). *Pennsylvania youth survey (PAYS)*. Retrieved from <https://www.pcccd.pa.gov/Juvenile-Justice/Pages/PAYS-County-Reports.aspx>



- Pennsylvania Department of Health. (n.d.). *COVID-19 data for Pennsylvania*. Retrieved from <https://www.health.pa.gov/topics/disease/coronavirus/Pages/Cases.aspx>
- Pennsylvania Department of Health. (n.d.). *Enterprise data dissemination informatics exchange (EDDIE)*. Retrieved from <https://www.phaim1.health.pa.gov/EDD/>
- Pennsylvania Department of Health. (n.d.). *School health statistics*. Retrieved from <https://www.health.pa.gov/topics/school/Pages/Statistics.aspx>
- United States Bureau of Labor Statistics. (2021). *Local area unemployment statistics*. Retrieved from <https://www.bls.gov/lau/>
- United States Census Bureau. (n.d.). *American community survey*. Retrieved from <https://data.census.gov/cedsci/>
- United States Census Bureau. (2021). *Decennial census*. Retrieved from <https://data.census.gov/cedsci/>
- United States Department of Health and Human Services. (2010). *Healthy people 2030*. Retrieved from <https://health.gov/healthypeople/objectives-and-data/browse-objectives>



## Appendix B: Key Stakeholder Survey Participants

- Blue Ridge School District, Superintendent
- B/S/S/T (Bradford, Sullivan, Susquehanna, Tioga counties) Area Agency on Aging, Inc, Executive Director
- Elk Lake High School, Certified School Nurse
- Elk Lake School District and Susquehanna County Career & Technology Center, Superintendent
- Montrose Area School District, School Counselor
- Montrose Area School District, Superintendent of Schools
- Montrose Jr/ Sr High School, Nurse Practitioner
- NEPA Community Health Care, Co-CEO/COO
- NEPA Community Health Care, Physician
- Susquehanna Community School District, Superintendent
- Susquehanna Community School District, School Counselor
- Susquehanna County Government, Susquehanna County Commissioner
- Susquehanna County Sheriff's Office, Sheriff
- Susquehanna-Wyoming Co. Transportation - Trehab, Transportation Director
- Trehab, Clinical Supervisor