

Evangelical Community Hospital Community Health Needs Assessment

July 1, 2021 – June 30, 2024

Adopted March 2021



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Our Commitment to Our Communities

Beginning in 1926 as the vision of three local physicians, Evangelical Community Hospital has been providing for the healthcare needs of Central Susquehanna Valley residents for nearly a century. Our nonprofit mission to provide exceptional healthcare, accessible to all, in the safest and most compassionate atmosphere possible to build a healthy community, guides our service and commitment as the community's Hospital.

Evangelical has continuously grown and evolved to meet the health and wellness needs of the surrounding communities. We continue to enhance and expand the services we provide. We constantly monitor changes in how healthcare is delivered so we are always ready to take advantage of opportunities that meet the needs of the community.

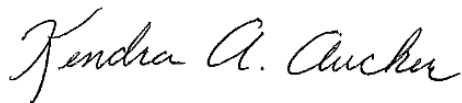
In the last two years, Evangelical launched our first joint venture with Geisinger at the Lewisburg YMCA at the Miller Center, offering a multidisciplinary approach to health and fitness that integrates medicine, athletics, recreation, nutrition, mindfulness, and friendship. The Hospital formed Evangelical Regional Mobile Medical Services (ERMMS) to support area ambulance companies struggling to recruit new volunteers and ensure quality emergency medical services across the region. We continued to work toward the completion of our new 112,000-square-foot Patient Room Improvement, Modernization, and Enhancement (PRIME) project, bringing private accommodations to our patients and new services, including an infusion center, intermediate care unit, and an orthopaedic unit.

As part of our commitment to the community, Evangelical conducts a Community Health Needs Assessment (CHNA) every three years. The CHNA findings are used by Evangelical for the development of a community health improvement plan. The findings are available to community stakeholders, service agencies, and public health organizations who can also use this valuable information as a resource to improve or add to their current services.

Evangelical shares a common goal with other healthcare providers in the region of improving the health of all residents. Evangelical will continue to seek collaborative opportunities, as well as coordination of services, to realize a healthier community.

Please join Evangelical, and partnering agencies, as we work together to improve the health and quality of life for all who live, work, and play in our community.

Thank you and live healthy,



Kendra A. Aucker
President & CEO

A Collaborative Approach to Community Health Improvement

CHNA Collaborating Health Systems

The 2021 Community Health Needs Assessment (CHNA) was conducted in partnership with Evangelical Community Hospital, Geisinger, and Allied Services Integrated Health System. The study area included 15 counties across central and northeastern Pennsylvania, which represented the health systems' collective service areas. Collaboration in this way conserves vital community resources while fostering a platform for "collective impact" that aligns community efforts toward a common goal or action. To distinguish unique service areas among hospitals, regional research and reporting was developed.

2021 CHNA Geographic Regions and Primary Service Counties

Region	Primary Service Counties	Hospitals
Central	Columbia County Montour County Northumberland County Schuylkill County Snyder County Union County	Geisinger Bloomsburg Hospital Geisinger Medical Center Geisinger Shamokin Area Community Hospital Geisinger Encompass Health Rehabilitation Hospital Evangelical Community Hospital
North Central	Clinton County Lycoming County	Geisinger Jersey Shore Hospital Geisinger Medical Center Muncy (new)
Northeast Region	Lackawanna County Luzerne County Wayne County Wyoming County	Allied Services Rehab Hospital Geisinger Community Medical Center Geisinger South Wilkes-Barre Geisinger Wyoming Valley Medical Center Heinz Rehab Hospital
Western Region	Centre County Juniata County Mifflin County	Geisinger Lewistown Hospital

The following pages describe the process, research methods, and findings of the 2021 CHNA.

2021 CHNA Executive Summary

CHNA Leadership

The 2021 CHNA was overseen by a Planning Committee of representatives from each health system, as well as a Regional Advisory Committee of hospital and health system representatives. Community health consultants assisted in all phases of the CHNA, including project management, data collection and analysis, and report writing.

CHNA Planning Committee

Rachel Manotti, Vice President Strategy and Market Advancement, Geisinger
Allison Clark, Community Benefit Coordinator, Geisinger
John Grabusky, Senior Director Community Relations, Geisinger
Barb Norton, Director Corporate & Foundation Relations, Allied Services Integrated Health System
Sheila Packer, Community Health and Wellness Manager, Evangelical Community Hospital

CHNA Regional Advisory Committee

David Argust, Vice President, Allied Services Integrated Health System
Jordan Barbour, Operations Director, Geisinger Marworth Treatment Center
Renee Blakiewicz, Administrative Director, Geisinger Community Medical Center
Julie Bordo, Vice Presidents, Geisinger Wyoming Valley Medical Center/Geisinger South Wilkes-Barre
Jim Brogna, Vice President, Allied Services Integrated Health System
Lissa Bryan-Smith, Vice President, Geisinger Bloomsburg Hospital
Sherry Dean, Operations Manager, Geisinger Community Medical Center
Stephanie Derk, Specialist Community Engagement, Geisinger
John Devine, MD, Vice President, Evangelical Community Hospital
Kristin Dobransky, Administrative Fellow, Geisinger Holy Spirit*
Brian Ebersole, Senior Director, Geisinger
Eileen Evert, Senior Director, Geisinger Health Plan
Starr Haines, Communications Specialist, Geisinger
Allison Hess, Vice President, Geisinger Health Plan
Kristy Hine, Associate Vice President, Geisinger Lewistown Hospital
Karen Kearney, Vice President, Allied Services Integrated Health System
Daniel Landesberg, Associate Vice President, Geisinger Wyoming Valley Medical Center/Geisinger South Wilkes-Barre
Jose Lopez, Administrative Fellow, Geisinger Lewistown Hospital
Diana Lupinski, Associate Vice President, Geisinger Jersey Shore Hospital/Geisinger Medical Center Muncy
Ryan McNally, Director, Miller Center Joint Venture
Lori Moran, Director, Geisinger
Michael Morgan, Administrative Director, Geisinger Medical Center/Geisinger Shamokin Area Community Hospital
Paulette Nish, Vice President, Geisinger Jersey Shore Hospital/Geisinger Medical Center Muncy
Karley Oeler, Administrative Fellow, Geisinger Medical Center
Tamara Persing, Vice President, Evangelical Community Hospital
Valerie Reed, Communications Specialist, Geisinger
Peter Rowe, Manager Internal Communications, Geisinger
Rebecca Ruckno, Director, Geisinger
Brock Trunzo, Communications Specialist, Geisinger Jersey Shore Hospital
Tina Westover, Senior Tax Accountant, Geisinger
Amy Wright, Business Development Director, Geisinger Encompass Health Rehabilitation Hospital
Randy Zickgraf, Director, Geisinger
Amy Zumkhawala-Cook, Administrative Director, Operations, Geisinger Holy Spirit*

*Geisinger Holy Spirit representatives served on the RAC through November 1, 2020, the effective date for the hospital's transfer of ownership to Penn State Health.

Consulting Team

Catherine Birdsey, MPH, CHES, Baker Tilly
Colleen Milligan, MBA, Community Research Consulting

CHNA Methodology

The 2021 CHNA was conducted from July to December 2020. Quantitative and qualitative methods, representing both primary and secondary research, were used to illustrate and compare health and social trends and disparities across each region and hospital service area. The following research methods were used to determine community health needs:

- > Statistical analysis of health and socioeconomic data indicators; a full listing of data references is included in Appendix A, and a summary of data findings is included in Appendix B
- > Electronic survey of key stakeholders, including experts in public health and individuals representing medically underserved, low-income and minority populations; a list of key informants and their respective organizations is included in Appendix C
- > Discussion and prioritization of community health needs to determine the most pressing health issues on which to focus community health improvement efforts

Community Engagement

Community engagement was an integral part of the 2021 CHNA. A Virtual Town Hall was held in August 2020 to announce the onset of the CHNA and encourage broad stakeholder participation. A Key Informant Survey was sent to nearly 1,000 community stakeholders to solicit input on health disparities, opportunities for collaboration, COVID-19 response, community health priorities, among other insights. Continued community engagement activities are planned to ensure ongoing dialogue and a forum for addressing community health needs.

Prioritized Community Health Needs

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 jointly determined by the CHNA collaborating health systems using feedback from community stakeholders. Through this process, CHNA partners affirmed the following priority health needs:

- > **Access to Care**
- > **Behavioral Health**
- > **Chronic Disease Prevention and Management**

These priorities are consistent with those determined in the previous 2018 CHNA and reflect complex needs requiring sustained commitment and resources.

Maternal and child health needs are also prevalent across the service area. While CHNA partners did not identify maternal and child health as a priority issue due to the need to focus available resources, many of the hospitals support maternal and child health strategies as part of their Implementation Plan. These strategies include free or low-cost classes and support groups for pregnant and new mothers, lactation consultation, treatment and support services for mothers in recovery, and social assistance, among others.

CHNA Implementation Plan

To direct community benefit and health improvement activities, CHNA partners created individual hospital Implementation Plans to detail the resources and services that will be used to address health priorities. The Implementation Plans build upon previous health improvement activities and take into consideration new health needs and the changing health care delivery environment as detailed in the 2021 CHNA.

Board Approval

The 2021 CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The research findings will be used to guide community benefit initiatives for the hospital and engage local partners to collectively address identified health needs.

The CHNA report was presented to the Evangelical Community Hospital Board of Directors and approved in March 2021. Evangelical is committed to advancing initiatives and community collaboration to support the issues identified through the CHNA.

Following the Board's approval, the CHNA report was made available to the public via the Evangelical website at <https://www.evanhospital.com/community-health-and-wellness/community-health-needs-assessment>.

For questions regarding the CHNA or Evangelical's commitment to community health, please contact Sheila Packer, Community Health and Wellness Manager, Evangelical Community Hospital at sheila.packer@evanhospital.com.

Central Region Summary of Findings

Population Trends

The Central Region is predominantly rural with small population centers scattered across the 6-county geography. The largest population center is Bloomsburg (Columbia County) with 14,290 residents, and home to Bloomsburg University of Pennsylvania. Other population hubs are centered around these cities and boroughs: Pottsville (Schuylkill County), with 13,965 residents; Berwick (Columbia County) with 10,118 residents; Sunbury (Northumberland County), with 9,487 residents; Shamokin (Northumberland County), with 7,092 residents; Tamaqua (Schuylkill County), with 6,784 residents; Selinsgrove (Snyder County), with 5,861 residents; Lewisburg (Union County), with 5,600 residents; and Danville (Montour County), with 4,656 residents.

Total population of the Central Region is approximately 400,000 and is projected to decline at a rate of 1.5% by 2025. Consistent with much of PA's rural geography, the population of most counties in the Central Region is declining, with the exception of Snyder County and Union County, projected to grow 1.8% and 1.1%, respectively, by 2025. The largest population decline is expected in Northumberland County (-3%), which also experienced a 3% population decline since 2017. Schuylkill County is projected to decline at 2.7%; Columbia County at 0.8%; and Montour County at 0.7%.

The Northumberland County population declined 3% from 2017, and is projected to decline an additional 3% by 2025

More than 20% of residents in Columbia (20.2%), Montour (23%), Northumberland (22.5%), and Schuylkill (21.8%) counties are age 65 or older compared to the state (19.3%) and national (16.6%) averages. Montour (45.6), Schuylkill (45.4), and Northumberland (45.2) counties have the highest median ages, compared to the state (41.5) and nation (38.5).

As a whole, the Central Region is significantly less diverse than state and national benchmarks. Approximately 90% or more of the counties' populations are White, compared to state (78.5%) and national (69%) averages. Union County is the most diverse: 6.5% of the population is Black; 6.3% is Latinx (of any race); and approximately 2% is Asian.

The federal prison in Union County significantly impacts community demographic data

Federal prisons within the Central Region significantly impact demographics in Schuylkill and Union counties with disproportionate incarceration rates among Black and Brown males that are reflected in census and socioeconomic data. Simultaneously, in line with

statewide and national trends, minority populations are growing in all communities across the Central Region. With respect to these coinciding trends, demographic data for these counties must be carefully considered to acknowledge the impact of incarcerated populations on broader community demographics. Union County data are particularly impacted by prison populations, which comprise 3% of the total county population.

There are five Amish settlements across the Central Region totaling approximately 2,000 residents. The estimated Amish population for the region increased more than 8% from 1,912 to 2,072 from 2017 to 2020.

Pennsylvania residents overall are slightly more likely to report a disability when compared to the nation. Residents of Schuylkill (18%) and Northumberland (17%) counties are more likely to have a disability compared to the state (14%) and national (13%) averages.

Socioeconomic Trends

The Central Region has a history of coal mining, agriculture, and manufacturing. While these industries have predominantly been replaced by healthcare and education industries as economic drivers, natural gas mining has brought new income sources, and new challenges, to communities in the Central Region.

Consistent with other rural communities across Pennsylvania, the Central Region reflects a predominantly blue-collar workforce; lower median income levels; rural poverty; increased food insecurity; average high school graduation rates with less higher education attainment; and more home ownership with lower housing cost burden. Despite common factors across the Central Region, distinct differences exist across the counties.

Montour County is home to Geisinger Medical Center, which employs thousands of clinical and non-clinical white-collar workers. This workforce trend is reflected in socioeconomic indicators. Montour County has one of the highest median household incomes and lowest poverty rates, and is the only county to have a higher percentage of residents attaining a bachelor's degree than the state and nation.

Montour and Union counties are home to prominent health and education industries and reflect more positive socioeconomic measures

Union County, home to Evangelical Community Hospital and Bucknell University, has similar income and poverty indicators as Montour County and the second highest percentage of residents attaining a bachelor's degree. Snyder County also has strong economic indicators, although the county's top employers, Wood-Mode, recently faced economic uncertainty, which may impact future socioeconomic standing.

About 33% of Key Informant Survey respondents named poverty among the top three contributing factors to health concerns, ranking it as the #3 contributor in the region. Related socioeconomic factors, including ability to afford healthcare and lack of transportation, were also identified as top contributors.

Overall Central Region poverty rates are generally consistent with state and national averages, but significant disparities exist between people of color and White populations

Overall Central Region poverty rates are generally consistent with state and national averages, but there is a wider disparity between people of color and White residents, and most counties

exceed state and national benchmarks on this measure. Schuylkill and Union counties reflect the highest disparities among Black and Latinx residents, with poverty rates up to five times more than Whites. This significant difference likely reflects the impact from the federal prison populations in these counties, but notable disparities in neighboring counties reinforce the gap in poverty rates between people of color and their White neighbors. In Snyder County, 33% of Black residents versus 10% of White residents live in poverty. In Northumberland County, 44% of Latinx residents live in poverty compared to 13% of White residents. In Montour County, 41% of Blacks versus 11% of Whites live in poverty.

Northumberland County has a higher percentage of children living in poverty (19.5%) relative to other counties. The county also has a higher percentage of food insecure children (18%). Food insecurity among children declined in all counties since the 2018 CHNA.

Food insecurity among children declined in all counties since the 2018 CHNA

Central Region residents are more likely to own their home, and are generally less cost burdened compared to statewide and national averages. Housing cost burden is defined as spending 30% or more of household income on rent or mortgage expenses. Residents of Schuylkill, Snyder, and Union counties have the highest home ownership rates, exceeding the state average. Central Region housing stock is older, particularly in Northumberland and Schuylkill counties, where 77%-79% of homes were built before 1980. Union County has the newest housing stock, followed by Montour County.

Fracking or hydrofracking has been a controversial industry across PA and the Central Region. It has brought economic benefit to the Central Region, but it has also generated concerns about health, increased housing rental costs, decreased property values, and long term environment impact. Continued monitoring of health, socioeconomic, and environmental factors are essential to better understand the full impact of this industry on the Central Region.

Unemployment more than doubled in all Central Region counties except Snyder due to COVID-19

As a result of the COVID-19 pandemic, Central Region unemployment rates more than doubled in all counties except Snyder from May 2019 to May 2020. Of interest, as of May 2020, current unemployment is lower for all counties than the state and nation.

Health Trends

Access to Healthcare

All Central Region counties except Montour and Union have fewer primary care providers than the state and nation, and all counties except Montour have fewer dentists and mental health providers. (Note that provider rates are calculated by the primary address of the office, and do not reflect satellite locations). Northumberland County has the lowest provider rates in the region. All counties except Union are dental Health Professional Shortage Areas (HPSAs); within Union County, Mifflinburg is a dental HPSA.

Key Informant Survey respondents affirmed the need for additional behavioral health services, particularly mental health services. Mental health services were the top ranked missing resource in the region, identified by 67.5% of respondents. Substance use disorder services were the third ranked missing resource, identified by 40% of respondents.

The total uninsured population continued to decline across the Central Region. All counties except Snyder and Union have a lower uninsured population than the state and nation. Snyder and Union county uninsured percentages are particularly high among youth, exceeding the statewide average by triple or more. Montour County also has an elevated uninsured rate among youth under six years.

The percentage of uninsured youth in Snyder and Union counties is more than triple state averages

Uninsured rates among Black and Latinx residents declined statewide and nationally, but continue to be disproportionately higher compared to Whites. Similar racial and ethnic disparities exist across the Central Region, although results should be interpreted with caution due to low population counts.

Chronic Disease Prevention and Management

All Central Region counties except Union have a higher prevalence of adult obesity than the state (31%) and nation (31%). Obesity in Northumberland (39%), Schuylkill (37%), Columbia (36%), and Snyder (35%) counties is increasing. Obesity trends in Montour (32.5%) and Union (30%) counties have been variable. About 43% of Key Informant Survey respondents named overweight/obesity among the top three health concerns, ranking it as the #3 concern for the region. Key informants saw health habits, including diet and exercise, as a top contributing factor to obesity.

Youth obesity is also higher in the Central Region. As of the 2017-2018 school year, 20% (Union) to 26% (Columbia, Northumberland) of students in grades 7-12 were obese compared to 19.5% of their peers statewide. Consistent with adult obesity trends, Columbia (26%), Northumberland (26%), Schuylkill (24%), and Snyder (24%) counties saw the largest increases.

Youth obesity is higher in all Central Region counties compared to the state

In contrast to national trends, tobacco use is increasing among adults in PA and the Central Region. Adult smoking trends began to rise in 2016 after steady declines since 2014. Union County saw the greatest increase in adult smoking (2 points), but Northumberland (19.5%) and Schuylkill (19%) counties continue to have the highest percentage of smokers compared to state (19%) and national (17%) averages. Vaping and e-cigarette use likely contributed to this trend reversal. Across PA, approximately 19% of youth report vaping/e-cigarette use. Within the Central Region, youth vaping prevalence is higher in Columbia, Northumberland, and Schuylkill counties, but all counties with reportable data saw significant increases from 2015 to 2019.

These risk factors may contribute to higher death rates from chronic disease. Columbia, Northumberland, and Schuylkill counties have among the highest chronic disease death rates, and a higher prevalence of obesity and tobacco use. Schuylkill County has consistently had the highest chronic disease death rates (excepting diabetes) in the region; significantly higher than the state and national rates.

Schuylkill County has consistently had the highest chronic disease death rates (excepting diabetes) in the region; significantly higher than the state and national rates

Montour and Union County have lower heart disease death rates than other Central Region counties, the state, and the nation, and rates are decreasing. Cancer death rates per 100,000 are increasing in Schuylkill (192.2), Columbia (177.7), Montour (177.1), and Northumberland (167.9) counties and are higher than the state (156.6) and national rates (149.1), which are decreasing. Consistent with higher smoking rates, Northumberland and Schuylkill Counties have the highest death rates due to lung cancers and chronic lower respiratory disease.

Higher poverty rates, lower educational attainment, and rural geographies consistent with most of the Central Region contribute to health disparities and reduce residents' ability to access needed health and social services. People of color historically and frequently experience a higher incidence of poor health and socioeconomic status than White people. While the Central Region is significantly less diverse compared to the state and nation, communities that benefit from more diversity must be monitored to appreciate the nature and extent of disparities among racial and ethnic subpopulations.

Behavioral Health

Mental health and substance use disorder were seen as top community health needs by Key Informant Survey respondents, ranked as the #1 and #2 health concerns respectively. All Central Region counties except Snyder and Union have a higher rate of mental disorders hospitalizations than the state. Northumberland County has the highest rate, followed by Schuylkill County. Both Columbia (17.5) and Schuylkill (25) counties have a high suicide death rate per 100,000; Schuylkill County exceeds the state and national benchmarks by more than 10 points.

Schuylkill County continued to have a higher number of deaths due to overdose than other Central Region counties. While the number of deaths generally declined from 2018 to 2019 across the full 15-county CHNA service region, they remained consistent in Schuylkill County, with 77 deaths reported in 2018 and 78 deaths reported in 2019. Northumberland County has the second highest number of overdose deaths in the region at 24 reported in 2018. Northumberland County also has an opioid overdose hospitalization rate per 100,000 (28.8) that exceeds the state rate (25.1).

Overdose deaths in Schuylkill County remained relatively stable from 2018 to 2019, despite a significant drop in deaths across other counties in the overall CHNA study area

Adult excessive drinking and DUI-related deaths increased in Union County; current percentages exceed state and national averages

Adult excessive drinking increased in all Central Region counties since the 2018 CHNA. Increases were marginal in all counties except Union, which saw a nearly 3-point increase, and leads the region at 22% of adults. Driving deaths due to alcohol impairment also increased in Union County from 38% to 44%, and is

higher than the statewide average of 27%. Snyder and Northumberland counties also saw 10-point increases in alcohol-impaired driving deaths from the 2018 CHNA.

Approximately 35% to 43% of youth in the Central Region report consistent feelings of depression compared with 38% of their peers statewide. About 10%-11.5% of youth have attempted suicide, compared to 9.7% statewide. Youth across the region report less substance use, with the exception of alcohol use among Schuylkill County youth. Of note, Columbia, Schuylkill, and Union county youth saw increases in mental distress and/or substance use.

Maternal & Child Health

All Central Region counties except Montour and Snyder have a lower birth rate than the state overall. Columbia and Schuylkill counties have historically had the lowest birth rates in the region. Birth rates are generally declining across the region, consistent with statewide trends, but teen births are higher than the state average (4%) in all reporting counties.

Teen births are higher than the state average in all reporting counties

Fewer pregnant women receive first trimester prenatal care in Central Region counties compared to the state (74%) and nation (77.5%). This measure has been declining for most counties in contrast to increasing trends across the state and nation.

In contrast to increasing trends across the state and nation, fewer women are receiving first trimester prenatal care in the Central Region

Despite lower prenatal care access, all Central Region counties except Columbia (9%) have a lower percentage of low birth weight babies compared to the state (8%) and nation (8%). Columbia County also has a higher percentage of preterm births (12%) than state (9.5%) and national (10%) averages, along with Montour (13%) and Schuylkill (10%) counties.

Women in Columbia (77%), Northumberland (76%), and Schuylkill (67%) counties are less likely to exclusively breastfeed their infants at hospital discharge; while Montour (88.5%), Snyder (88%) and Union (88%) counties are more likely to breastfeed their infants, compared to the state (82%) and national (83.5%) averages.

More women smoke during pregnancy in all Central Region counties, except Union (9%), when compared to state (10%) and national (6.5%) averages. Northumberland County (21%) has the highest

1 in 5 women smoke during pregnancy in Northumberland and Schuylkill counties, twice as many as the state average

percentage, followed by Schuylkill (20%), Columbia (17%), Snyder (13%), and Montour (11%) counties.

Columbia, Northumberland, and Schuylkill counties experience notable maternal and child health disparities related to prenatal care access, low birth weight, breastfeeding, and/or smoking. Consistent with this finding, the infant death rate for these counties increased and/or exceeds state and national rates.

Senior Health

Central Region counties are aging faster than the state and national averages. Compounding an increasing aging population, seniors in these counties are more likely to have multiple chronic conditions than their peers statewide or nationally. Seniors in Columbia, Montour, and Union counties generally have fewer chronic conditions compared to seniors in Northumberland, Schuylkill, and Snyder counties.

In all Central Region counties, a higher proportion of seniors have multiple chronic conditions and live alone compared to national averages

Complicating the challenge of chronic disease management, more seniors live alone in PA (13%) and throughout the Central Region than the national average (11%). Union County has the highest percentage of seniors living alone (15%), followed by Northumberland (14.5%) and Schuylkill (14%) counties. Living alone is a key driver for social

isolation, which is associated with poor mental and physical health among seniors.

Despite having an increased number of conditions, annual Medicare spending among Central Region senior Medicare beneficiaries is lower than state and national spending, which may reflect an overall lower cost of living.

The Alzheimer's disease death rate (calculated per 100,000 people) is highest among seniors in Montour County (395.2) compared to 233.2 statewide. This difference may be attributed to more seniors receiving end of life care in Montour County.

COVID-19 Statistics

Coronaviruses are a large family of viruses which may cause illness in animals or humans. COVID-19, named as a novel coronavirus discovered in Wuhan China in December 2019, caused a worldwide pandemic, resulting in nearly one million deaths worldwide (as of the printing of this report) and global economic impact. New insights are derived daily during this dynamic situation and we will continue to learn from data collected throughout the pandemic. As of January 3, 2021, Schuylkill County had 8,491 cases and 252 deaths; Northumberland County had 5,225 cases and 236 deaths; Union County had 3,001 cases and 44 deaths; Columbia County had 2,947 cases and 75 deaths; Snyder County had 1,967 cases and 44 deaths; and Montour County had 1,153 cases and 25 deaths due to COVID-19. Of note, Northumberland County has the second highest COVID-19 death rate in the state behind Mifflin County.

Responses from the Key Informant Survey indicated that community representatives were “somewhat” to “moderately” worried about the long-term impact of COVID-19 on communities and residents. They were most concerned about the impact on the mental and emotional health of residents, the well-being of the elderly, and community financial health. Most agencies had effectively transitioned to using technology and social media to provide virtual learning and services, although key informants acknowledged an increased need for safety net services. They encouraged increased cross-sector collaboration to disseminate services and consistent communication.

Racial and Ethnic Disparities

Historical public policies and systematic inequities have perpetuated stark and persistent racial disparities in wealth, education attainment, health, power distribution, and nearly every measure of well-being for people of color. While efforts to reconcile these disparities are being made, people of color in the Central Region continue to experience these inequities, as demonstrated by disproportionate poverty levels, lower education attainment, and related socioeconomic measures. These social determinants of health directly drive decreased access to healthcare, higher death rates, and overall lower life expectancy. About 45.5% of key informants indicated that social and community context, including perceptions of discrimination and equity, declined in the past 3-5 years.

About 45.5% of key informants indicated that social and community context declined in the past 3-5 years


Across the state and nation, and demonstrated where data is available for the Central Region, Black and Latinx residents historically experience disproportionately high death rates due to chronic conditions. Women of color and their babies also experience poorer maternal and birth outcomes.

Because the Central Region is less racially and ethnically diverse, these disparities can be difficult to demonstrate due to low numbers for data collection. To ensure disparities are quantified and reconciled, it is imperative that patient outcome data is carefully tracked and regularly reviewed for patients of color to ensure equitable healthcare access and outcomes.

Rural Health Factors

Approximately 52% of key informants perceived that economic stability had declined across the region. Rural communities have been particularly impacted due to decreased availability of services, as well as increased travel time and distance to health and social services. These factors can delay or deter residents' ability to receive care when they need it.

Generally, more healthcare providers and social services are available in Montour and Union counties. Data demonstrate increased health and social need in Columbia, Schuylkill, and Northumberland counties, which is consistent with a more rural geography and the reduced availability of services.



Telehealth and other virtual services are increasing and can be a successful way to mitigate rural health disparities. Internet service and smart devices are essential tools for successful utilization of these services. In the Central Region, residents are less likely to own a computer or smart phone compared to the state and national averages. These percentages are lowest in Northumberland County. Less than 77% of households in the Central Region have an internet subscription, compared to about 80% statewide and nationally.

Community Engagement and Collaboration

Among questions on the Key Informant Survey, respondents were asked about their partnerships with health providers and community engagement of diverse stakeholders and residents. Approximately 69% of respondents indicated that they regularly partnered with hospitals on health improvement initiatives. About 65% of respondents thought that these types of partnerships were effective at addressing health needs, while 20% of informants thought there was room for improvement. Similarly, 18% of informants thought that healthcare providers could do better to garner resident feedback or engage residents when developing health improvement initiatives.

Using shared data or measurement tools; aligning service areas; and getting local leaders to work together by overcoming competition or varying agendas were seen as the top ways that healthcare and social service providers could improve effective collaboration. Multiple respondents referenced “silos” that keep community-based organizations from effectively collaborating on community initiatives. Respondents referenced the need for formal structure and organizational commitment to long-term change to foster accountable leadership and advance discussion and planning.

A full summary of CHNA research findings and comparisons to state and national benchmarks follows.



Full Report of CHNA Research Findings

Secondary Data Profile

Background

Secondary data, including demographic, socioeconomic, and public health indicators, were analyzed for the Central Region and Evangelical Community Hospital service area to measure key data trends and priority health issues identified in the 2018 CHNA, and to assess emerging health needs. Data were compared to Pennsylvania (PA) and United States (US) benchmarks and Healthy People 2020 (HP2020) goals, as available, to assess areas of strength and opportunity for the region. Healthy People 2020 is a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

All reported demographic and socioeconomic data were provided by ESRI Business Analyst, 2020 and the US Census Bureau, American Community Survey, unless otherwise noted. Public health data were analyzed for a number of health issues, including access to care, health behaviors and outcomes, chronic disease prevalence and mortality, mental health and substance use disorder, and maternal and child health. Data were compiled from secondary sources including the Pennsylvania Department of Health, the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS), the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources can be found in Appendix A.

Age-adjusted rates are referenced throughout the report to depict a comparable burden of disease among residents. Age-adjusted rates are summary measures adjusted for differences in age distributions so that data from one year to another, or between one geographic area and another, can be compared as if the communities reflected the same age distribution.

The BRFSS is a telephone survey of residents age 18 or over conducted nationally by states as required by the CDC. A consistent survey tool is used across the US to assess health risk behaviors, prevalence of chronic health conditions, access to care, preventive health measures, among other health indicators. BRFSS data indicators are referenced throughout the public health data analysis.

A summary of public health data findings is included in Appendix B. The summary provides a snapshot of areas of strength and opportunity for the region in comparison to state and national benchmarks.

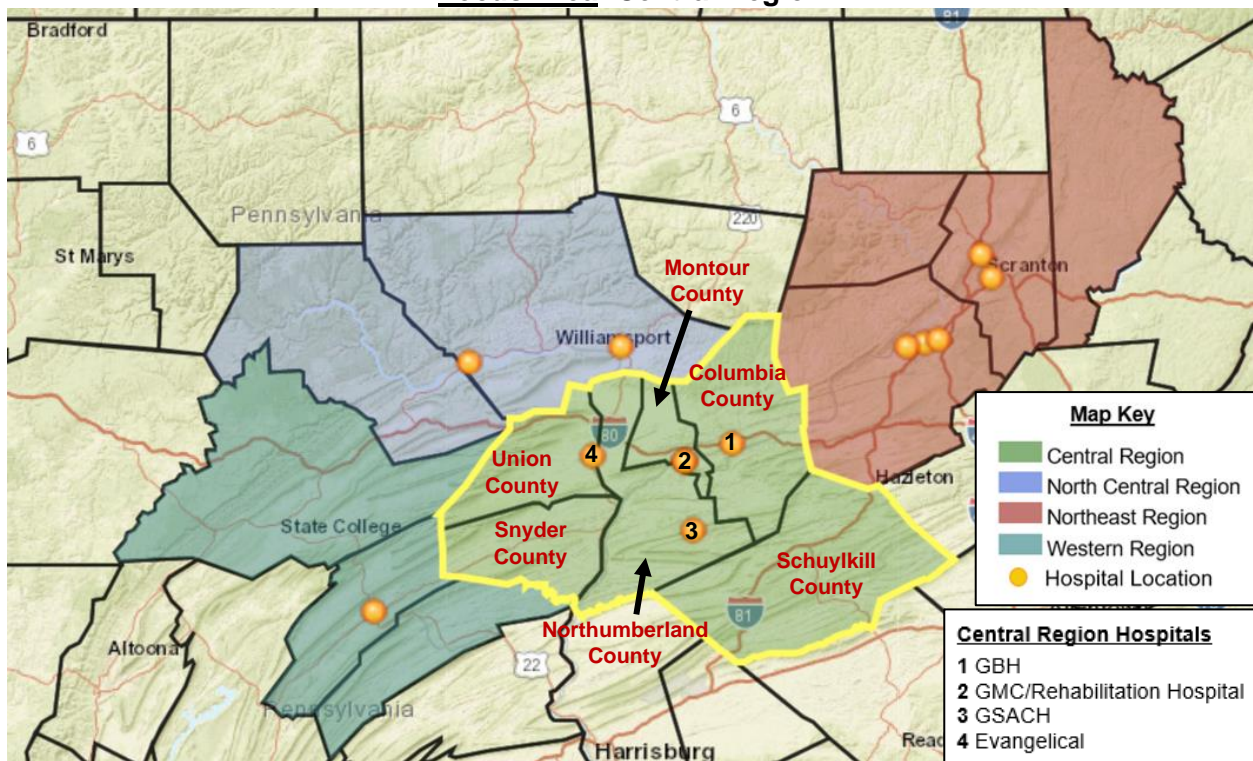
Central Region Service Area

For purposes of the CHNA, Evangelical Community Hospital and its CHNA partners, Geisinger and Allied Services Integrated Health System, focused on their collective primary service areas comprising 15 counties across Pennsylvania. To better understand the strengths and challenges of unique communities across this wide geography, CHNA partners grouped communities into four regional service areas based on common political jurisdictions, geographical considerations, population trends, and related factors.

The Central Region is comprised of 6 counties and is primarily served by the following hospitals: Evangelical Community Hospital (Evangelical), Geisinger Bloomsburg Hospital (GBH), Geisinger Medical Center (GMC), Geisinger Encompass Health Rehabilitation Hospital (Rehabilitation Hospital), and Geisinger Shamokin Area Community Hospital (GSACH), shown on the map below.

2021 CHNA 15-County Service Area

Focus Area: Central Region



Central Region Population Trends

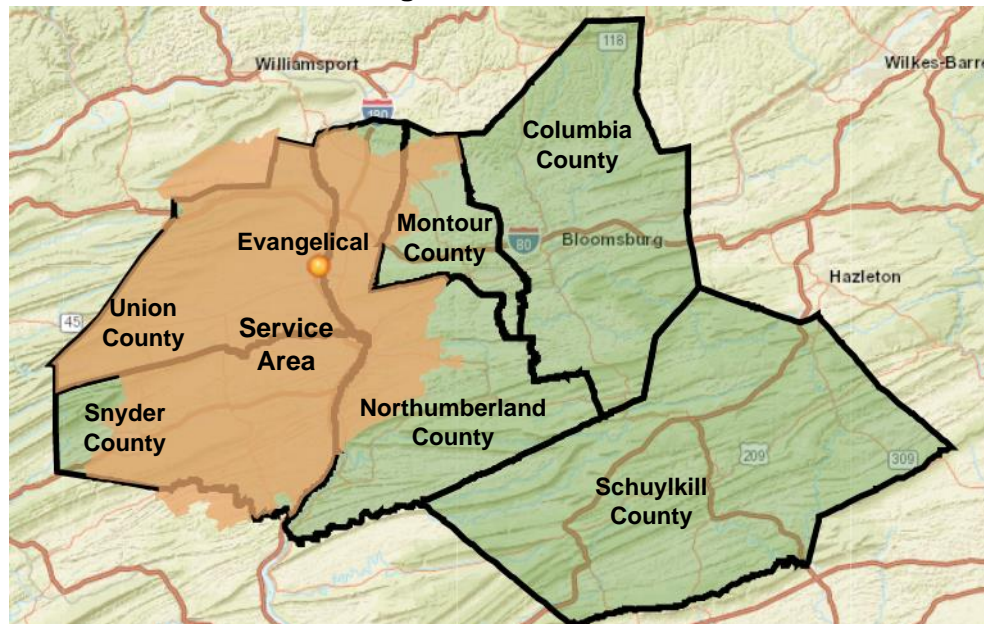
	2017 Population*	2020 Population	Growth 2017-2020	Growth by 2025
Columbia County	67,293	66,324	-1.4%	-0.8%
Montour County	19,011	18,414	-3.1%	-0.7%
Northumberland County	94,060	91,329	-2.9%	-3.0%
Schuylkill County	146,871	143,461	-2.3%	-2.7%
Snyder County	41,142	41,401	0.6%	1.8%
Union County	45,358	44,331	-2.3%	1.1%
Total Population	413,735	405,260	-2.0%	-1.5%

*Population as measured at the time of the 2018 CHNA.

Evangelical Community Hospital Service Area Description

For the purposes of the 2021 CHNA, Evangelical defined its primary service area as 37 zip codes within the Central Region, shown in the map below. The primary service area was identified based on the patient zip codes of origin comprising 80% or more of hospital discharges.

Evangelical Service Area

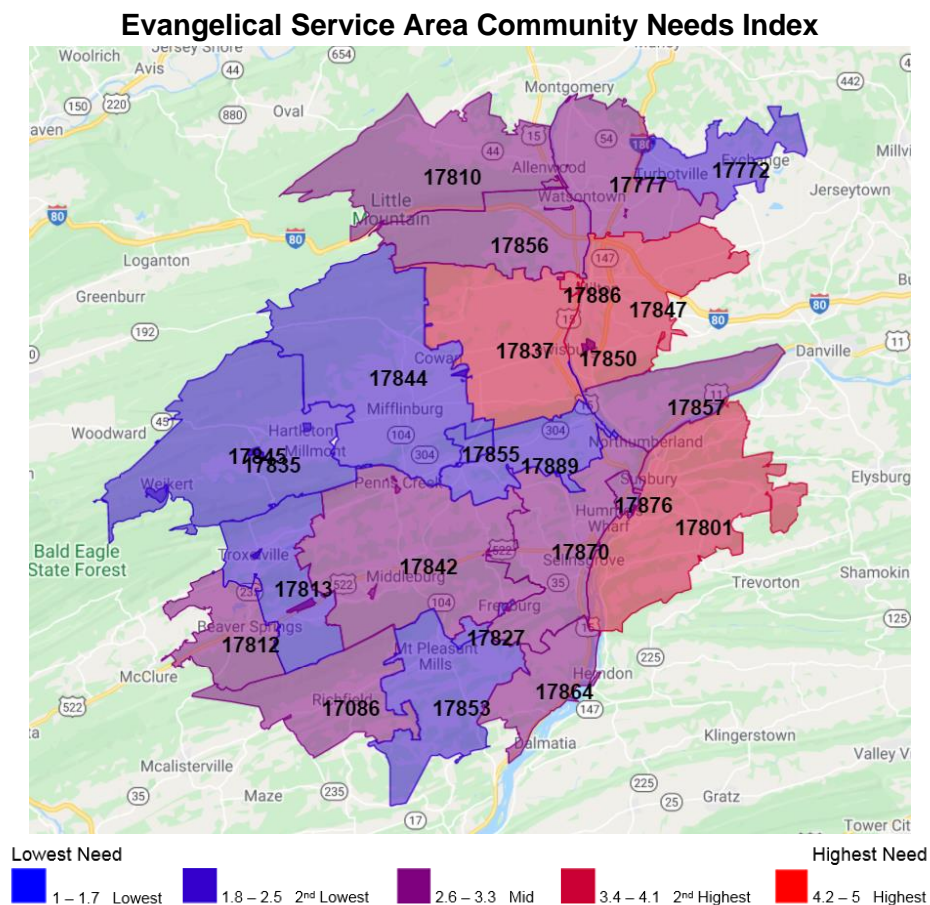


Evangelical Service Area Zip Codes

Northumberland County	Snyder County	Union County
17730, Dewart	17086, Richfield	17810, Allenwood
17749, McEwensville	17812, Beaver Springs	17829, Hartleton
17772, Turbotville	17813, Beavertown	17835, Laurelton
17777, Watsontown	17827, Freeburg	17837, Lewisburg
17801, Sunbury	17831, Hummels Wharf	17844, Mifflinburg
17847, Milton	17833, Kreamer	17845, Millmont
17850, Montandon	17842, Middleburg	17855, New Berlin
17857, Northumberland	17843, Beaver Springs	17856, New Columbia
17865, Pottsgrove	17853, Mount Pleasant Mills	17880, Swengel
	17861, Paxtonville	17883, Vicksburg
	17862, Penns Creek	17885, Weikert
	17864, Port Trevorton	17886, West Milton
	17870, Selinsgrove	17887, White Deer
	17876, Shamokin Dam	17889, Winfield*

*Zip Code 17889, Winfield includes portions of both Snyder and Union counties.

CNI scores for service area zip codes 17801, 17837, 17847, and 17886 are higher and generally increasing



The Evangelical service area comprises a majority White population with little racial or ethnic diversity. Nearly 92% of the population identifies as White compared to 69% nationwide. Zip codes with notable population diversity, including 17810, Allenwood and 17837, Lewisburg, are home to a US Penitentiary and Bucknell University, respectively. Population diversity within these zip codes is skewed by inmates or university students.

Consistent with the state overall, the service area population is older with 20% of residents age 65 or over compared to 17% nationwide. Zip codes 17777, Watsontown; 17847, Milton; and 17857, Northumberland have among the highest proportion of senior residents in the service area and are projected to experience notable population decline of approximately 3% by 2025.

The total service area population is projected to remain stable through 2025 with varying growth trends across zip codes. Zip code 17829, Hartleton is projected to have the greatest population growth of 5.8% by 2025, although the current population is small at 68 people. Zip code 17801, Sunbury is projected to have the greatest population decline of 3.4% by 2025.

Social determinants of health indicators for the Evangelical service area are largely consistent with the state and/or nation. The service area has pockets of isolated poverty, primarily in small population zip codes. Several zip codes have a higher proportion of residents with low insurance coverage and education attainment; however, these findings may be skewed by Amish populations, particularly in zip codes 17844, Mifflinburg and 17864, Port Trevorton.

Demographic and socioeconomic data indicators for Evangelical service area zip codes are shown on the following pages.

The following tables analyze demographic characteristics for Evangelical's service area, as well as select social determinants of health contributing to zip code CNI scores. Cells highlighted in **yellow** are at least 3 percentage points *higher* than the state and nation.

Evangelical Service Area 2020 Population (pop.) Demographics

	Total Pop.	Pop. Growth by 2025	Asian	Black	White	Latinx (any race)	Under Age 18	Age 65 or Over
17086	2,208	0.9%	0.5%	0.7%	96.9%	1.5%	23.3%	16.2%
17730	22	0.0%	0.0%	0.0%	100.0%	0.0%	18.2%	18.2%
17749	91	0.0%	0.0%	1.1%	98.9%	0.0%	17.6%	25.3%
17772	2,885	-0.9%	0.2%	0.7%	97.7%	1.0%	23.5%	18.8%
17777	7,256	-2.4%	0.6%	1.1%	96.5%	1.7%	19.8%	22.3%
17801	15,741	-3.4%	0.3%	2.6%	91.0%	7.6%	19.5%	21.5%
17810	5,729	0.5%	2.0%	29.8%	56.0%	21.9%	8.6%	8.4%
17812	1,554	2.8%	0.2%	0.3%	97.9%	0.5%	24.2%	19.8%
17813	2,668	2.9%	0.2%	0.4%	97.8%	0.8%	22.9%	18.0%
17827	644	1.1%	0.2%	0.2%	98.6%	0.5%	17.7%	20.7%
17829	68	5.8%	0.0%	0.0%	100.0%	1.5%	23.5%	19.1%
17835	8	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
17837	19,142	1.1%	3.4%	5.0%	86.8%	6.2%	16.1%	19.0%
17842	9,585	2.1%	0.1%	0.8%	97.6%	1.5%	21.8%	18.5%
17844	10,075	0.4%	0.4%	1.1%	97.1%	1.5%	23.2%	18.2%
17845	3,018	3.4%	0.3%	0.8%	97.8%	1.4%	22.3%	19.3%
17847	11,668	-2.9%	0.5%	2.6%	91.3%	6.7%	20.5%	22.5%
17850	641	-1.4%	0.2%	1.4%	95.6%	3.3%	20.8%	18.7%
17853	3,341	0.6%	0.1%	0.5%	98.4%	0.6%	26.3%	16.6%
17855	1,096	4.2%	0.6%	0.5%	98.4%	0.5%	21.6%	17.4%
17856	3,806	1.3%	0.1%	1.6%	95.8%	1.8%	18.6%	21.5%
17857	7,233	-2.9%	0.4%	1.3%	95.1%	3.5%	17.6%	25.6%
17864	2,664	3.0%	0.3%	0.7%	98.3%	1.0%	28.9%	15.3%
17870	15,243	0.9%	1.5%	2.6%	92.6%	5.0%	16.1%	18.9%
17876	1,796	2.8%	2.0%	0.7%	94.5%	2.2%	15.4%	32.1%
17880	2	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
17886	891	0.8%	1.0%	4.2%	90.1%	5.5%	18.6%	30.6%
17887	91	0.0%	0.0%	0.0%	98.9%	0.0%	20.9%	20.9%
17889	2,931	1.6%	1.4%	0.9%	95.9%	1.4%	19.1%	21.7%
Total Service Area	132,097	-0.1%	1.0%	3.3%	91.9%	4.7%	19.2%	19.8%
PA	--	0.9%	3.8%	11.4%	78.5%	8.2%	19.9%	19.3%
US	--	3.6%	5.9%	13.0%	69.4%	18.8%	22.0%	16.6%

Source: Esri

Note: The following zip codes are postal codes, and data are not reported: 17831, 17833, 17843, 17861, 17862, 17865, 17883, and 17885.

Evangelical Service Area Social Determinants of Health Indicators

	2014-2018 Households in Poverty	2020 No High School Diploma	2014-2018 No Health Insurance	2014-2018 Renter Households	2020 CNI	2017 CNI*
17086	7.8%	15.3%	13.9%	23.0%	2.6	2.4
17730	4.8%	11.1%	15.2%	23.1%	NA	NA
17749	13.3%	1.4%	6.3%	17.7%	NA	NA
17772	10.5%	12.0%	9.2%	18.3%	2.0	1.8
17777	8.8%	10.2%	10.2%	29.6%	2.8	2.8
17801	15.6%	12.4%	4.9%	40.7%	3.6	3.4
17810	9.1%	11.5%	17.1%	20.3%	3.2	3.2
17812	17.5%	14.2%	9.8%	29.3%	2.8	2.8
17813	10.9%	15.2%	6.1%	26.2%	2.2	2.6
17827	5.5%	5.5%	6.0%	26.7%	1.8	2.4
17829	10.9%	17.8%	24.5%	25.0%	NA	NA
17835	0.0%	14.3%	0.0%	33.3%	2.4	3.6
17837	11.8%	11.6%	4.3%	40.7%	3.6	3.4
17842	11.5%	11.1%	10.0%	25.9%	2.6	2.6
17844	8.7%	14.7%	15.2%	28.6%	2.2	2.6
17845	10.1%	14.1%	17.3%	22.7%	2.2	3.0
17847	12.5%	11.2%	5.9%	34.8%	3.6	3.2
17850	13.3%	10.7%	6.1%	28.3%	3.0	3.0
17853	7.5%	21.9%	19.1%	23.2%	2.4	2.4
17855	9.3%	6.1%	6.2%	24.2%	2.0	1.8
17856	16.9%	10.8%	22.5%	20.8%	2.6	2.2
17857	9.6%	8.8%	3.9%	29.3%	2.6	2.4
17864	15.6%	31.6%	38.0%	21.4%	2.6	2.8
17870	8.5%	8.4%	7.5%	34.9%	3.0	2.8
17876	8.6%	6.6%	3.8%	41.6%	2.8	2.4
17880	11.5%	0.0%	20.0%	0.0%	NA	NA
17886	17.8%	10.8%	11.4%	48.7%	3.4	3.4
17887	16.7%	17.7%	20.2%	17.0%	NA	NA
17889	3.9%	10.0%	9.6%	17.3%	1.8	1.8
Total Service Area	11.2%	11.9%	9.3%	32.0%	--	--
PA	12.3%	8.7%	6.2%	31.0%	--	--
US	13.4%	11.3%	9.4%	36.2%	--	--

Source: Esri & Dignity Health

*CNI score reported at the time of the 2018 CHNA. Zip codes without data were not included in the 2018 CHNA service area and/or do not have a reportable CNI score due to low population.

Note: The following zip codes are postal codes, and data are not reported: 17831, 17833, 17843, 17861, 17862, 17865, 17883, and 17885.

Regional Demographics and Socioeconomics

Analyses of demographic and socioeconomic data are essential in understanding health trends and determining key drivers of health status. Socioeconomic indicators play a significant role in community and individual health. Known as **social determinants of health**, they are defined as factors within the environment in which people live, work, and play that can affect health and quality of life. Social determinants of health are often the root causes of **health disparities**.

Demographic Key Findings

- > The Pennsylvania population as a whole is less diverse than the population nationwide; the Central Region population is less diverse than the state. More than 90% of residents in all counties except Union identify as White compared to 78.5% statewide. Union County has a slightly more diverse population, particularly Black and Latinx, but diversity is skewed by the US Penitentiary located within the county. Research studies have shown that Blacks and Latinxs are incarcerated at a rate 2-5 times higher than Whites.
- > Consistent with the 2018 CHNA, population diversity within the Central Region is increasing, although at a slower pace than the state and nation. The White population as a percentage of the total population will continue to decline through 2025, with the greatest decline projected in Montour County (2 percentage points), followed by Northumberland and Schuylkill counties (1.4 percentage points).
- > Pennsylvania and Central Region counties have a higher median age than the US, primarily due to a senior population that is growing at a faster rate than the nation overall. Montour, Northumberland, and Schuylkill counties have the highest median ages; nearly 1 in 4 residents in these counties are age 65 or over. Columbia, Snyder, and Union counties have a lower median age in comparison due in part to local universities and a higher proportion of college-age adults.
- > Pennsylvania residents overall are slightly more likely to report a disability when compared to the nation. Residents of Northumberland and Schuylkill counties are more likely to report a disability when compared to the state. Northumberland County has the highest prevalence of disabilities, impacting 7% of youth and 38% of seniors. Statewide averages are 5% and 34% respectively.
- > From 2017 to 2020, the estimated Amish population for the region grew from 1,912 to 2,072. Snyder County has a larger Amish population relative to total county population, which may also contribute to greater language diversity among residents.
- > Residents of all Central Region counties are less likely to have access to internet, including broadband, when compared to the state and nation. All counties except Montour are also less likely to have access to a computer device. Smartphone access is particularly low across the region at approximately 60%-65% compared to a national average of 76%. Within the region, residents of Northumberland County are among the least likely to have a computer device or internet access.

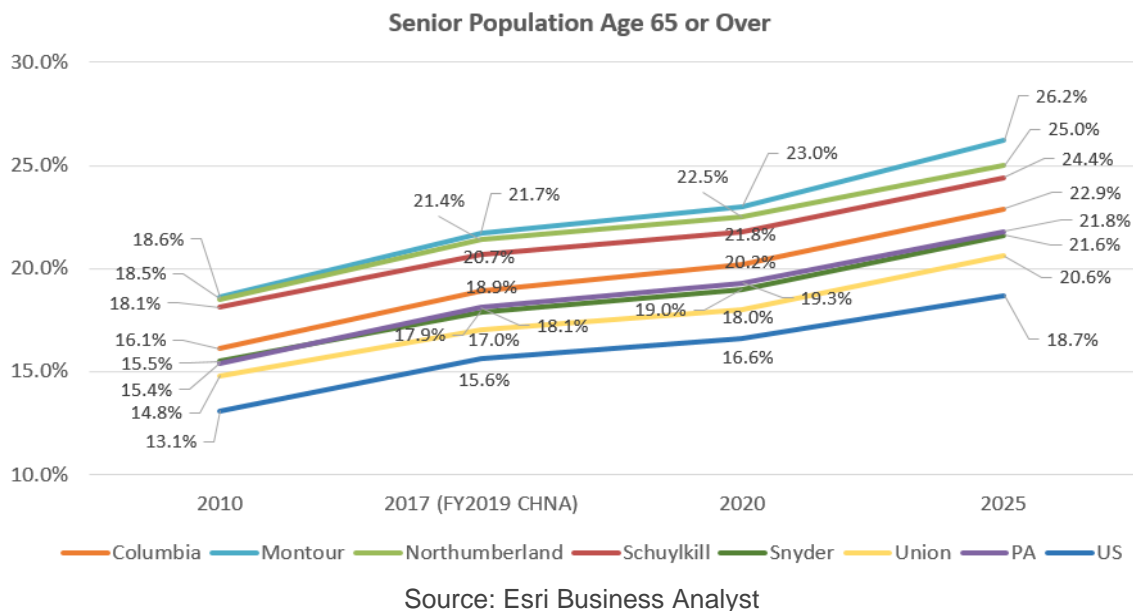
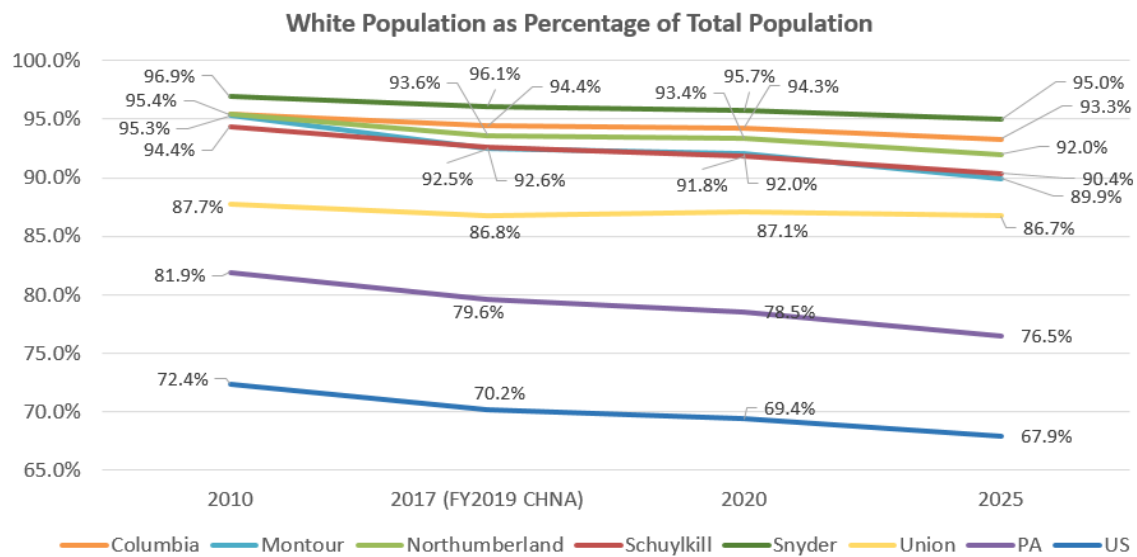
Demographic Data Summary

Yellow highlighting indicates a percentage that is at least 3 points *higher* than the state and nation.

Grey highlighting indicates a percentage that is at least 3 points *lower* than the state and nation.

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA	US
Racial and Ethnic Diversity (ESRI)								
2020 Asian	1.2%	3.7%	0.4%	0.6%	0.8%	1.9%	3.8%	5.9%
2025 Projection	1.4%	5.0%	0.5%	0.6%	0.9%	2.4%	4.5%	6.5%
2020 Black	2.0%	1.8%	2.7%	3.3%	1.3%	6.5%	11.4%	13.0%
2025 Projection	2.2%	2.1%	3.2%	3.6%	1.5%	6.2%	11.8%	13.1%
2020 White	94.3%	92.0%	93.4%	91.8%	95.7%	87.1%	78.5%	69.4%
2025 Projection	93.3%	89.9%	92.0%	90.4%	95.0%	86.7%	76.5%	67.9%
2020 Latinx, any race	3.0%	3.2%	4.0%	5.4%	2.6%	6.3%	8.2%	18.8%
2025 Projection	3.8%	3.9%	5.2%	7.0%	3.2%	6.6%	9.8%	20.1%
Primary language other than English (2014-2018)	3.1%	6.3%	3.9%	4.8%	9.6%	10.5%	11.3%	21.5%
Age Distribution (ESRI, 2020)								
Under 15 years	14.0%	16.2%	15.6%	15.0%	17.2%	14.1%	16.5%	18.4%
15-24 years	17.8%	10.1%	10.2%	9.8%	15.1%	17.6%	12.7%	13.0%
25-34 years	11.4%	11.0%	12.3%	12.4%	11.6%	12.9%	12.8%	14.0%
35-54 years	22.5%	24.0%	24.5%	26.0%	23.3%	24.6%	24.6%	25.0%
55-64 years	14.1%	15.6%	14.8%	14.9%	13.8%	12.9%	14.2%	13.0%
65+ years	20.2%	23.0%	22.5%	21.8%	19.0%	18.0%	19.3%	16.6%
Median Age	41.6	45.6	45.2	45.4	40.4	39.1	41.6	38.5
Disability Status (US Census Bureau, 2014-2018)								
Total population	13.3%	14.2%	16.7%	17.6%	11.9%	12.8%	13.9%	12.6%
Under 18 years	4.4%	3.5%	6.5%	7.3%	4.5%	3.2%	5.3%	4.2%
65+ years	30.6%	32.7%	36.0%	37.8%	30.7%	36.3%	34.1%	35.0%
Ambulatory	17.8%	17.6%	21.8%	23.2%	16.3%	23.1%	21.2%	22.2%
Independent Living	11.7%	13.9%	14.4%	12.6%	13.7%	11.2%	14.2%	14.5%
Hearing	13.1%	15.0%	15.0%	16.1%	14.4%	19.7%	14.1%	14.6%
Cognitive	6.3%	7.0%	7.9%	7.9%	8.0%	8.4%	8.0%	8.8%
Vision	4.4%	4.9%	7.2%	6.2%	3.9%	6.8%	5.7%	6.4%
Household Internet/Digital Access (US Census Bureau, 2014-2018)								
Computer device (1+)	83.5%	83.8%	78.5%	81.6%	81.4%	82.6%	86.5%	88.8%
Desktop/laptop	73.4%	74.4%	68.3%	72.0%	72.2%	74.1%	76.6%	77.9%
Smartphone	64.0%	66.2%	59.3%	63.5%	63.8%	62.2%	70.9%	75.9%
Other	48.0%	54.7%	45.5%	49.2%	51.8%	51.4%	57.9%	61.5%
Internet subscription	76.4%	76.6%	71.4%	74.8%	74.0%	74.6%	79.9%	80.9%
Dial-up only	0.8%	0.9%	1.0%	0.8%	0.9%	1.1%	0.7%	0.5%
Broadband	75.7%	75.6%	70.4%	74.0%	73.2%	73.5%	79.2%	80.4%

Notable Demographic Trends



Estimated Amish Population (pop.) by Settlement

County	Settlements	2017 Pop.	2020 Pop.	% Change
Columbia/Montour	Bloomsburg/Danville	662	763	15.3%
Montour/ Northumberland	Turbotville/Danville	328	286	-12.8%
Northumberland	Northumberland/Dornsife	452	496	9.7%
Snyder	McClure	320	373	16.6%
Union	Winfield	150	154	2.7%
Central Region		1,912	2,072	8.4%
Pennsylvania		74,251	81,499	9.8%

Source: Elizabethtown College, Young Center for Anabaptist and Pietist Studies

Socioeconomic Key Findings

- > All Central Region counties except Montour have a higher proportion of blue-collar workers than the state and nation. Montour County is home to Geisinger Medical Center, which employs thousands of clinical and non-clinical white-collar workers. Montour County also has one of the highest median household incomes and lowest poverty rates in the region, and is the only county to have a higher percentage of residents attaining a bachelor's degree compared to the state and nation.
- > Union County, home to Evangelical Community Hospital and Bucknell University, has similar income and poverty indicators to Montour County and the second highest percentage of residents attaining a bachelor's degree. Snyder County also has strong economic indicators, although they should continue to be monitored as one of the county's top employers, Wood-Mode, recently faced economic uncertainty.
- > A similar percentage of Central Region residents live in poverty with less than a 4-point difference between the counties with the highest (Columbia, 14.3%) and lowest (Snyder, 10.6%) rates. Poverty rates have been largely stable in all counties except Montour, which has seen annual increases despite a growing median household income. This finding is indicative of a widening wealth gap between top and bottom earners.
- > While all Central Region counties have a similar or lower percentage of children living in poverty as the state and nation, Northumberland County has a higher percentage relative to other counties. Northumberland County also has a higher rate of child food insecurity, although child food insecurity declined in all counties from the 2018 CHNA.
- > COVID-19 has increased unemployment rates. Within the Central Region, unemployment more than doubled in all counties except Snyder from May 2019 to May 2020. Current unemployment is lower for all counties than the state and nation.
- > Pennsylvania and Central Region residents are more likely to own their home when compared to the nation. Residents of Schuylkill, Snyder, and Union counties have the highest home ownership rates, exceeding the state. Homes in the Central Region are generally more affordable with fewer homeowners considered housing cost burdened. Renters in the Central Region are also less likely to report housing cost burden, although rent burden is still significant, affecting nearly half of renters in all counties except Snyder (33%).
- > In general, occupants of older housing have higher rates of chronic disease and accidental injury. Pennsylvania's housing stock is older than the nation's with 70% of homes built before 1980. Central Region housing stock is also older, particularly in Northumberland and Schuylkill counties, where 77%-79% of homes were built before 1980. Union County has the newest housing stock, followed by Montour County.
- > Racial and ethnic socioeconomic disparities exist across the Central Region, although findings should be interpreted with caution due to low population counts. Most notably, poverty rates are as high as 53% among Black residents (Schuylkill County) and 65% among Latinx residents (Union County). In all counties except Montour, Black and Latinx residents are notably less likely to attain higher education.

Socioeconomic Data Summary¹

Red highlighting indicates potential *disparity* based on at least a 3-point difference from the state and nation.
Green highlighting indicates potential *strength* based on at least a 3-point difference from the state and nation.

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA	US
Income and Poverty (US Census Bureau, 2014-2018)								
Median household income	\$49,889	\$57,183	\$47,063	\$49,190	\$57,638	\$56,026	\$59,445	\$60,293
All people in poverty	14.3%	11.1%	13.9%	12.7%	10.6%	11.3%	12.8%	14.1%
Asian	21.9%	8.7%	23.4%	13.0%	0.0%	3.3%	14.3%	11.5%
Black	42.8%	16.3%	29.0%	53.3%	32.8%	41.2%	26.9%	24.2%
White	13.9%	11.1%	13.2%	11.7%	10.4%	9.6%	10.0%	11.6%
Latinx ²	37.5%	41.0%	44.4%	36.4%	19.4%	65.2%	29.4%	21.0%
Children	17.1%	16.7%	19.5%	17.3%	17.8%	13.6%	18.1%	19.5%
Seniors	8.0%	6.7%	9.4%	9.1%	10.0%	8.5%	8.1%	9.3%
Households with SNAP ³	11.2%	9.4%	13.5%	15.8%	9.8%	10.7%	13.2%	12.2%
Food Insecurity (Feeding America, 2018)								
All people	10.5%	10.0%	12.1%	11.7%	9.4%	9.5%	10.9%	11.5%
Children	15.9%	14.7%	18.2%	17.6%	14.8%	13.4%	15.1%	15.2%
Unemployment (US Bureau of Labor Statistics)								
May 2019	4.6%	3.3%	5.0%	4.8%	6.3%	4.1%	4.0%	3.4%
May 2020	11.8%	8.9%	12.8%	12.8%	10.1%	9.9%	13.2%	13.0%
Housing (US Census Bureau, 2014-2018)								
Renters	30.5%	31.2%	29.1%	24.6%	27.8%	28.0%	31.0%	36.2%
Cost burden ⁴	44.5%	46.4%	44.2%	47.6%	33.1%	44.8%	48.4%	50.2%
Owners	69.5%	68.8%	70.9%	75.4%	72.2%	72.0%	69.0%	63.8%
Median home value	\$149,100	\$181,500	\$115,200	\$97,400	\$161,400	\$180,200	\$174,100	\$204,900
Cost burden ⁴	24.6%	20.0%	24.5%	25.2%	20.9%	23.1%	26.0%	28.7%
Built before 1980	67.7%	60.6%	77.4%	78.5%	62.2%	58.4%	70.1%	54.2%
Education (ESRI, 2020; US Census Bureau, 2014-2018 race/ethnicity data)								
No high school diploma	8.9%	8.2%	11.5%	10.2%	12.9%	12.2%	8.7%	11.3%
Bachelor's degree+	23.9%	34.7%	17.2%	17.3%	19.7%	27.2%	32.3%	33.1%
Asian	60.1%	85.2%	60.6%	40.0%	67.1%	49.4%	55.4%	53.5%
Black	20.5%	37.4%	7.3%	2.4%	15.9%	5.3%	18.5%	21.1%
White	22.2%	29.9%	16.2%	16.6%	18.2%	27.5%	31.7%	32.9%
Latinx ²	13.2%	48.5%	12.3%	9.2%	17.9%	10.9%	15.8%	15.8%

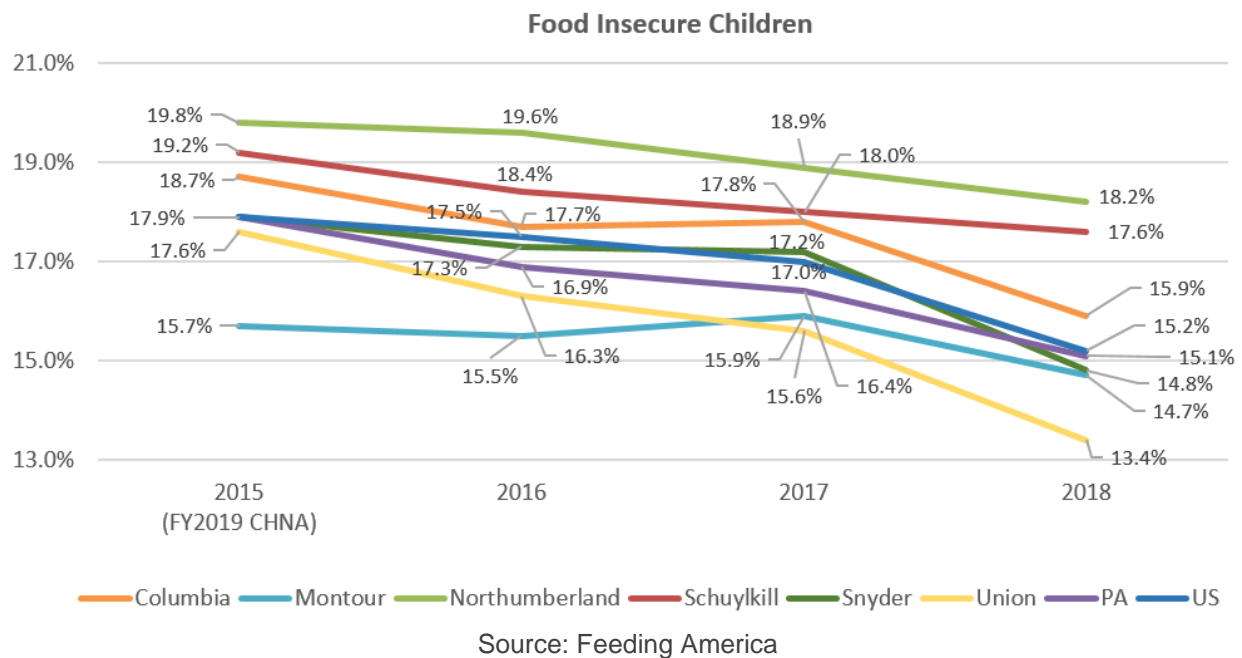
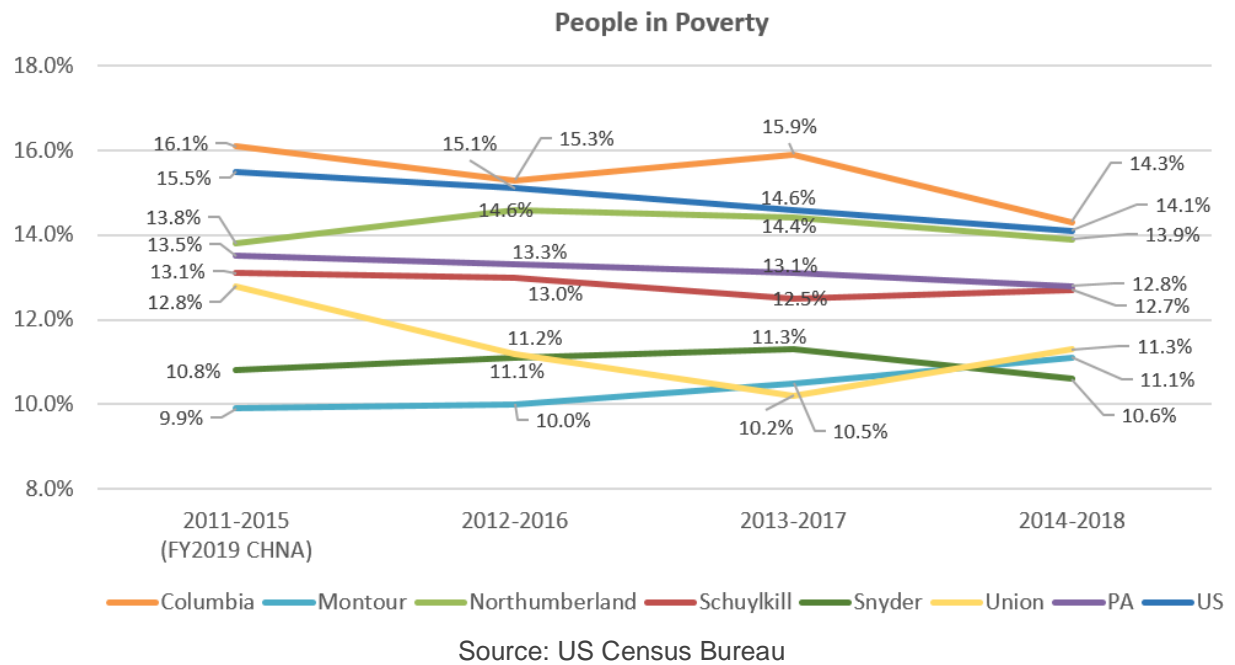
¹ Race/ethnicity data are based on small counts; interpret data findings with caution.

² Latinx, any race

³ Supplemental Nutrition Assistance Program.

⁴ Housing cost burden is defined as renters and owners spending 30% or more of household income on housing-related costs.

Notable Socioeconomic Trends



Public Health Data Analysis

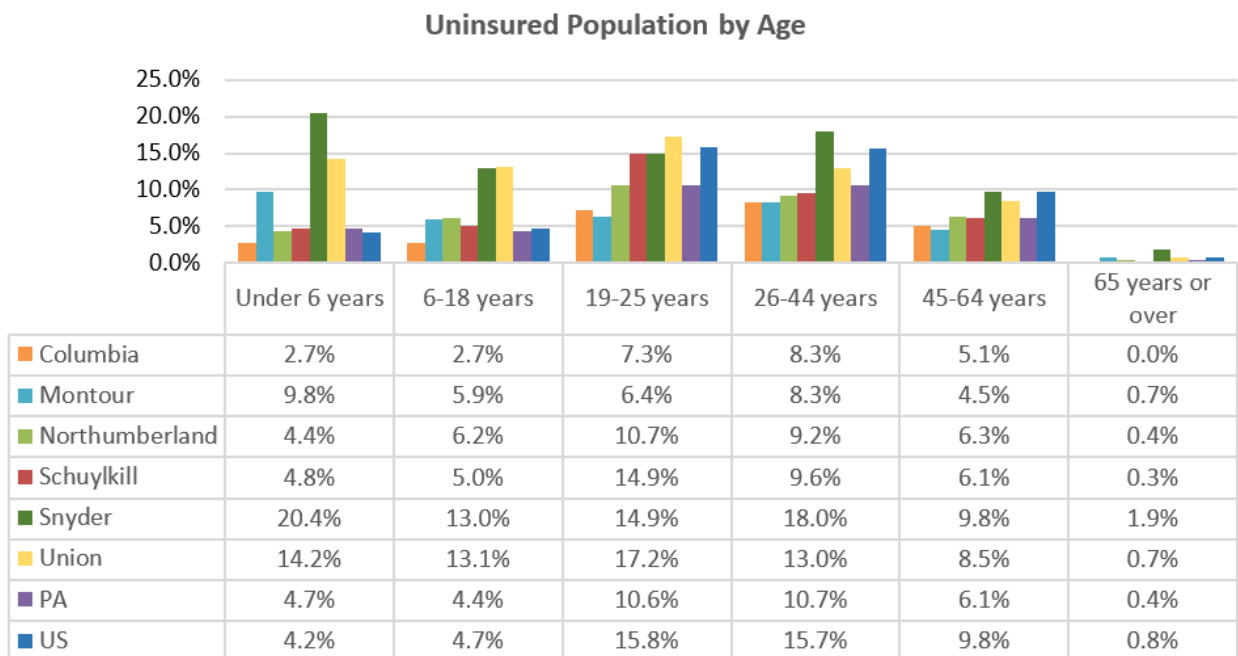
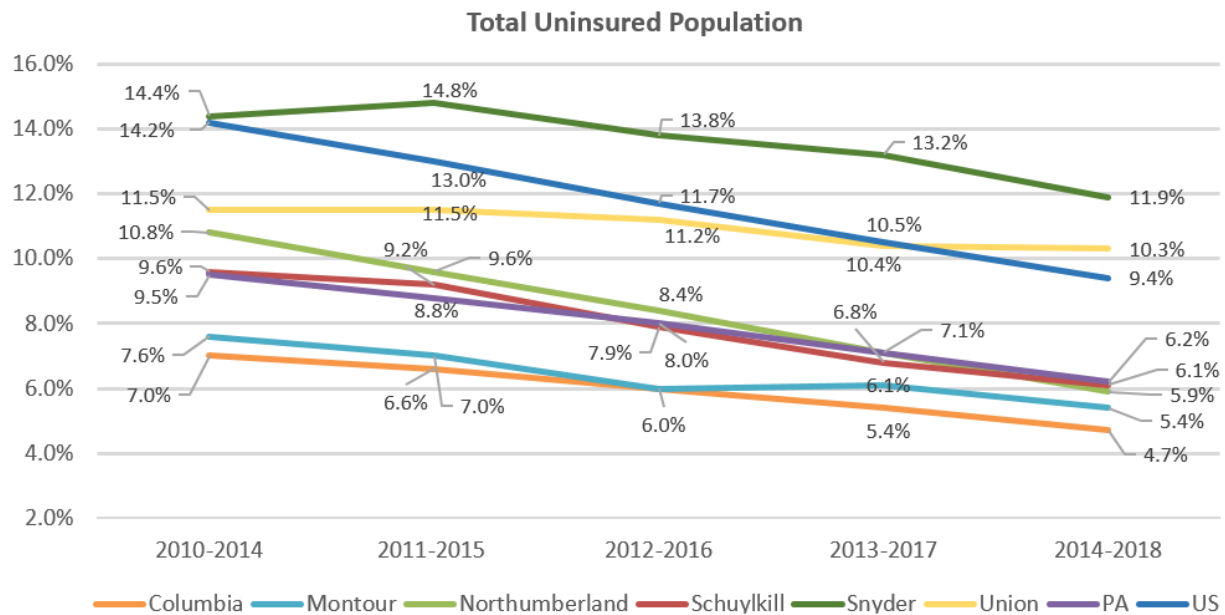
Public health data supports that the 2018 CHNA priorities of Access to Care, Behavioral Health, and Chronic Disease Prevention and Management continue to be community health needs within the Central Region. These priorities reflect complex needs requiring sustained commitment and resources.

The following sections highlight key public health data findings by topic area, with a focus on priority health needs and vulnerable and high-risk populations.

Healthcare Access Key Findings

- > The total uninsured population continued to decline across the region. All counties except Snyder and Union have a lower uninsured population than the state and nation. Snyder and Union county uninsured percentages are particularly high among youth, exceeding statewide averages by triple or more. Montour County also has an elevated uninsured rate among youth under six years.
- > Uninsured rates among Black and Latinx residents declined statewide and nationally, but continue to be disproportionately higher compared to Whites. Similar racial and ethnic disparities exist across the Central Region, although results should be interpreted with caution due to low population counts.
- > Employer-based insurance continues to be the majority coverage type within the Central Region, covering a similar or higher percentage of residents as the state. Consistent with the expansion of Medicaid in PA, the percentage of Medicaid covered residents increased from the 2018 CHNA. Within the Central Region, Northumberland and Schuylkill counties have the highest Medicaid insured population at 21%.
- > Provider availability is a barrier to healthcare access within the Central Region, outside of Montour County. All counties except Montour and Union have fewer primary care providers (PCP) than the state and nation. Montour and Union, home to Geisinger Medical Center and Evangelical Community Hospital, were the only counties to see increases in PCP availability. All counties except Montour also have fewer dentists than the state and nation; all counties except Union are Health Professional Shortage Areas for low-income residents. The mental health provider rate increased across the region, but all counties except Montour have a lower provider rate than the state and nation.
- > Potentially preventable hospitalizations are inpatient stays that might have been avoided with effective primary or preventative care. Within the Central Region, Northumberland and Schuylkill counties have a higher rate of preventable hospitalizations than the state.
- > COVID-19 has highlighted long-standing, systemic health and socioeconomic disparities among minority populations, particularly Black residents. Across PA, the COVID-19 death rate is nearly 2 times higher among Black residents as White residents. Within the Central Region, Columbia, Northumberland, and Schuylkill counties have higher COVID-19 death rates and higher reported socioeconomic barriers, particularly for Black residents. Of note, as of January 3, 2021, Northumberland County has the second highest COVID-19 death rate in the state behind Mifflin County.

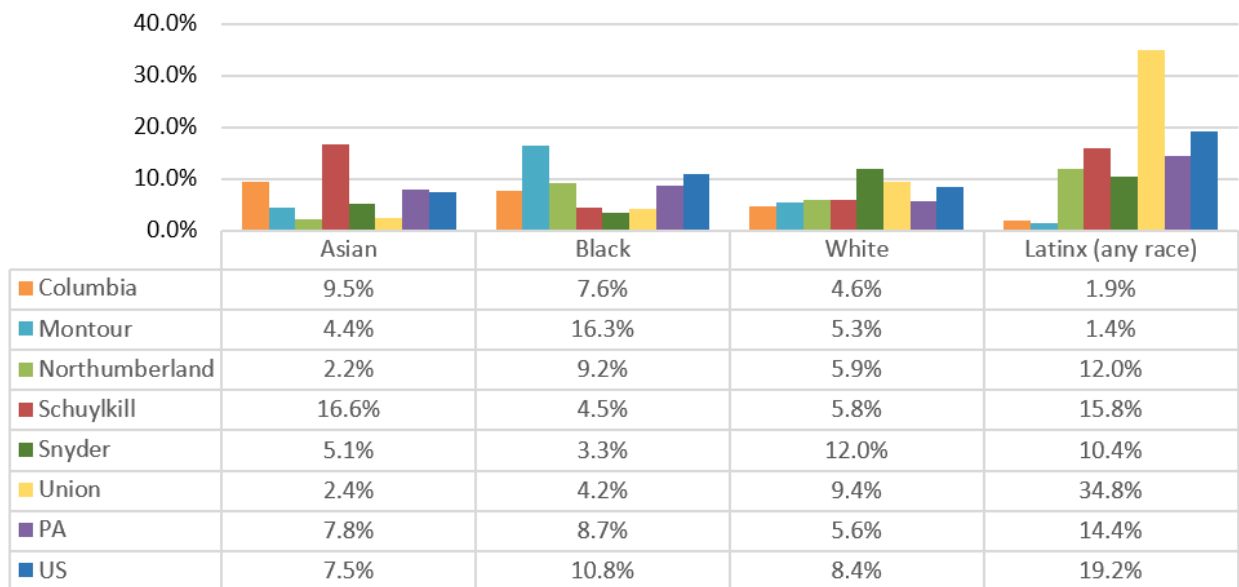
Health Insurance Coverage Data



Source: US Census Bureau, 2014-2018

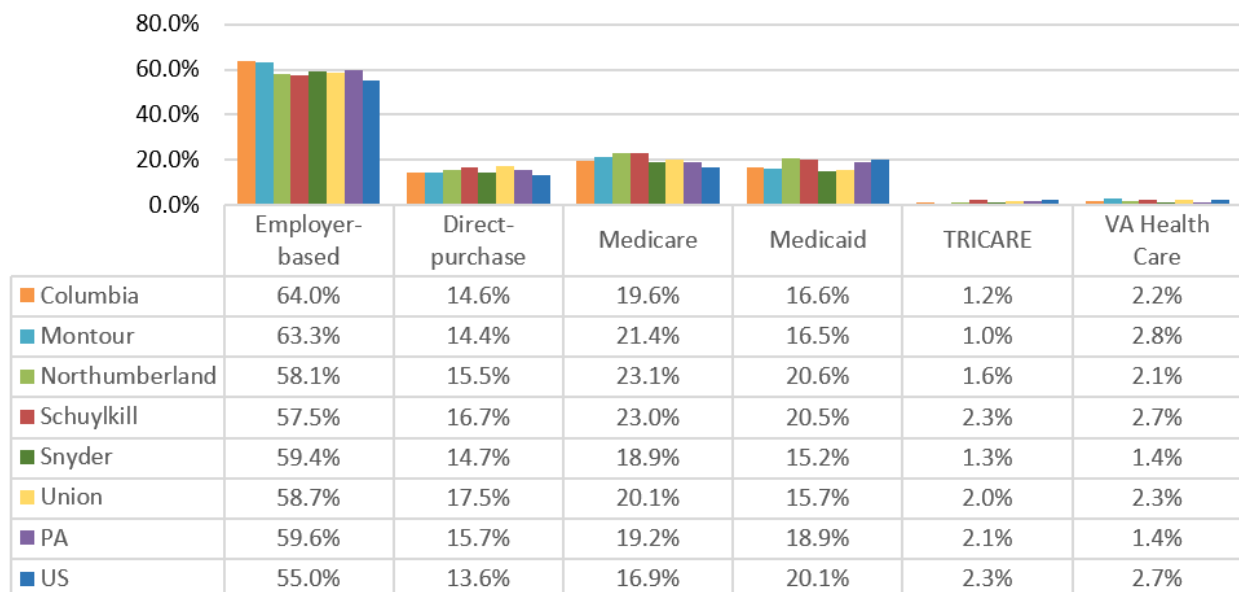
Health Insurance Coverage Data

Uninsured Population by Race & Ethnicity



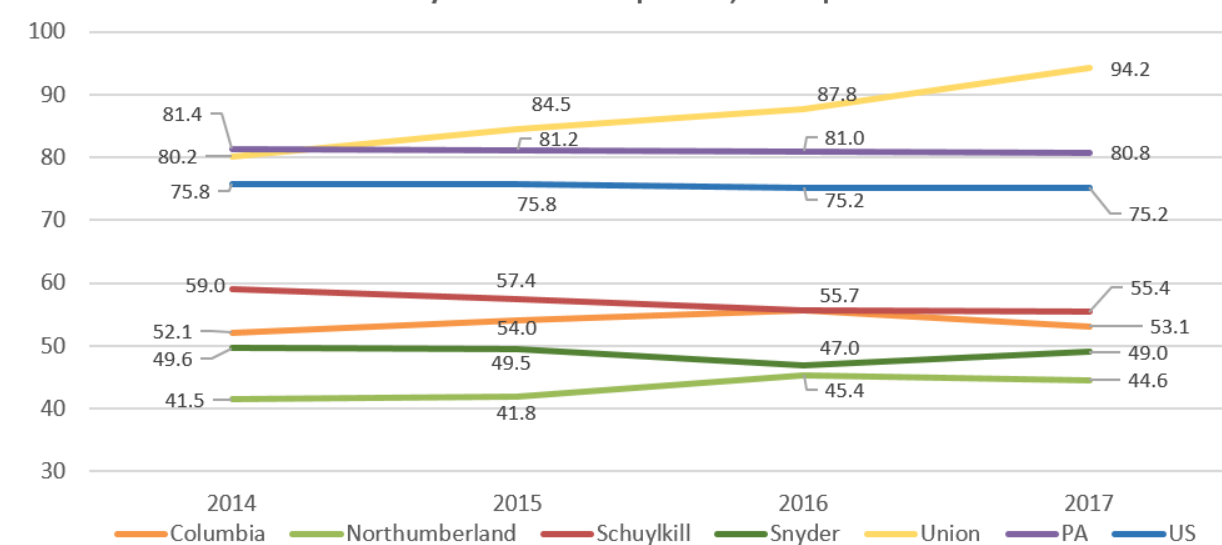
Source: US Census Bureau, 2014-2018

Insured Population by Coverage Types (alone or in combination)



Source: US Census Bureau, 2014-2018

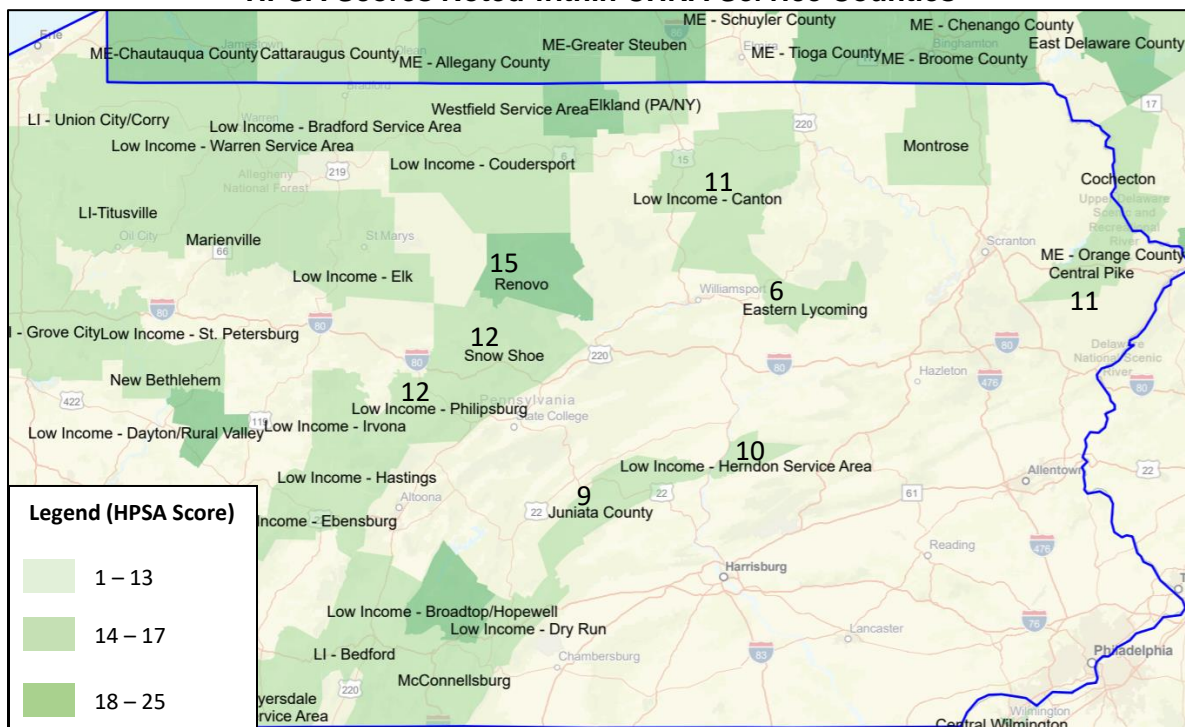
Primary Care Providers per 100,000 Population



Source: Health Resources & Services Administration

*Note: Geisinger Medical Center is located in Montour County; the county's 2017 provider rate was 514.4.

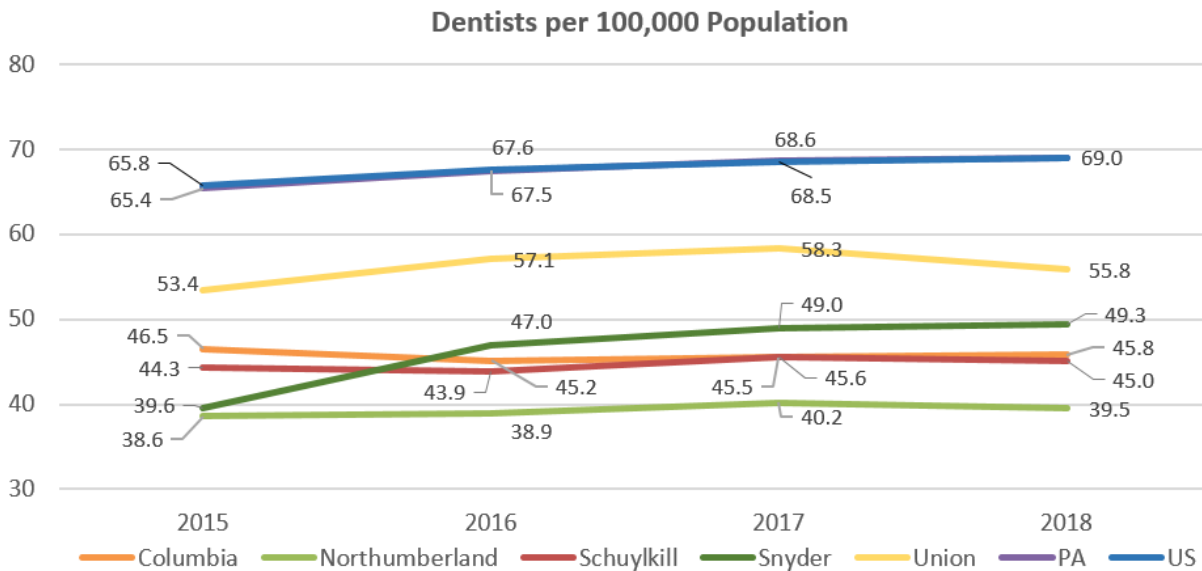
Primary Care Health Professional Shortage Areas (HPSA) HPSA Scores Noted within CHNA Service Counties



Source: Health Resources & Services Administration

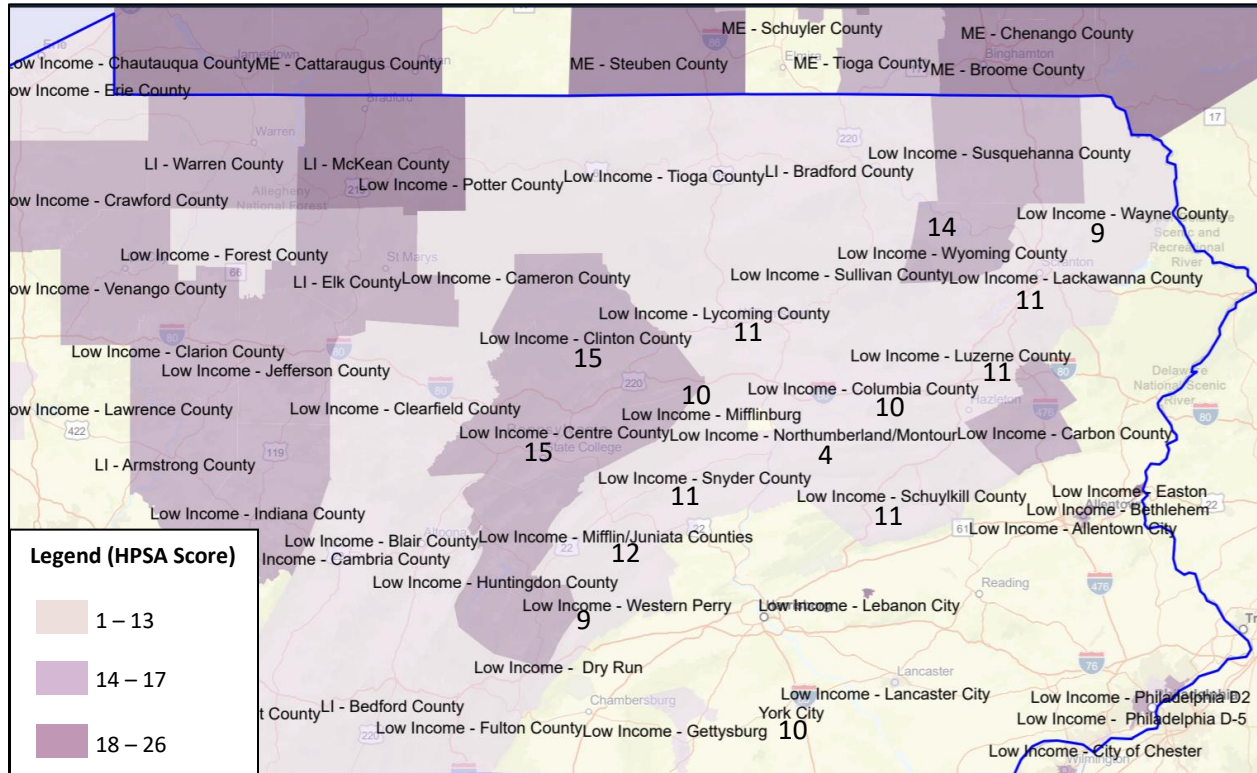
*Primary care HPSAs can receive a score between 0-25 with 25 indicating the highest need.

Provider Availability Data



*Note: Geisinger Medical Center is located in Montour County; the county's 2018 provider rate was 115.1.

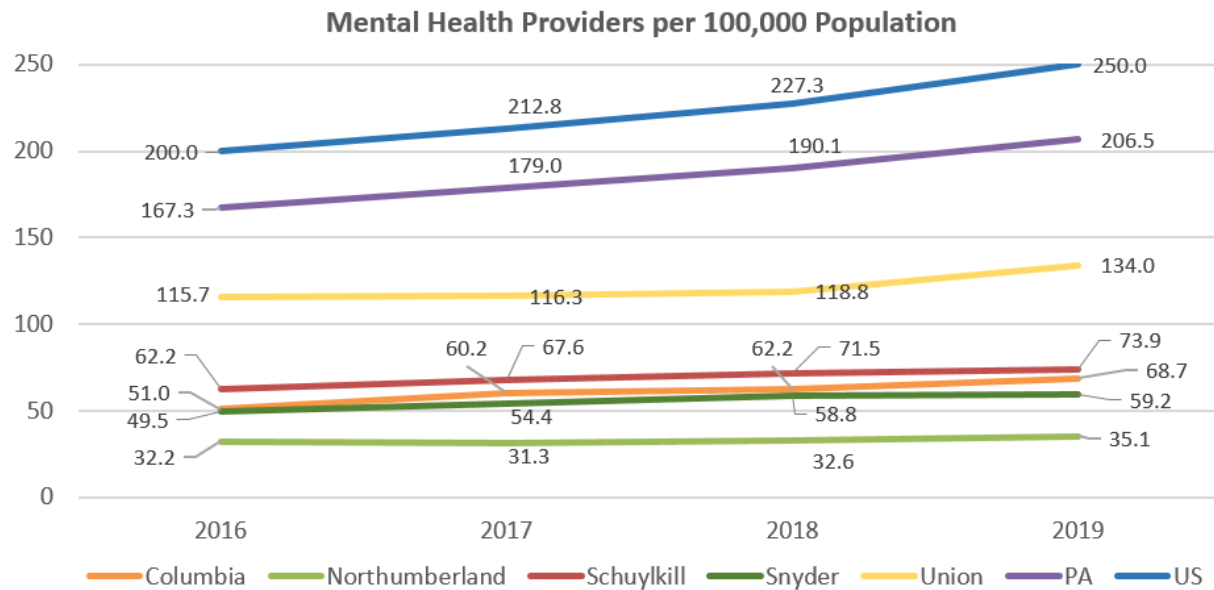
Dental Care Health Professional Shortage Areas (HPSA) HPSA Scores Noted within CHNA Service Counties



Source: Health Resources & Services Administration

*Dental care HPSAs can receive a score between 0-26 with 26 indicating the highest need.

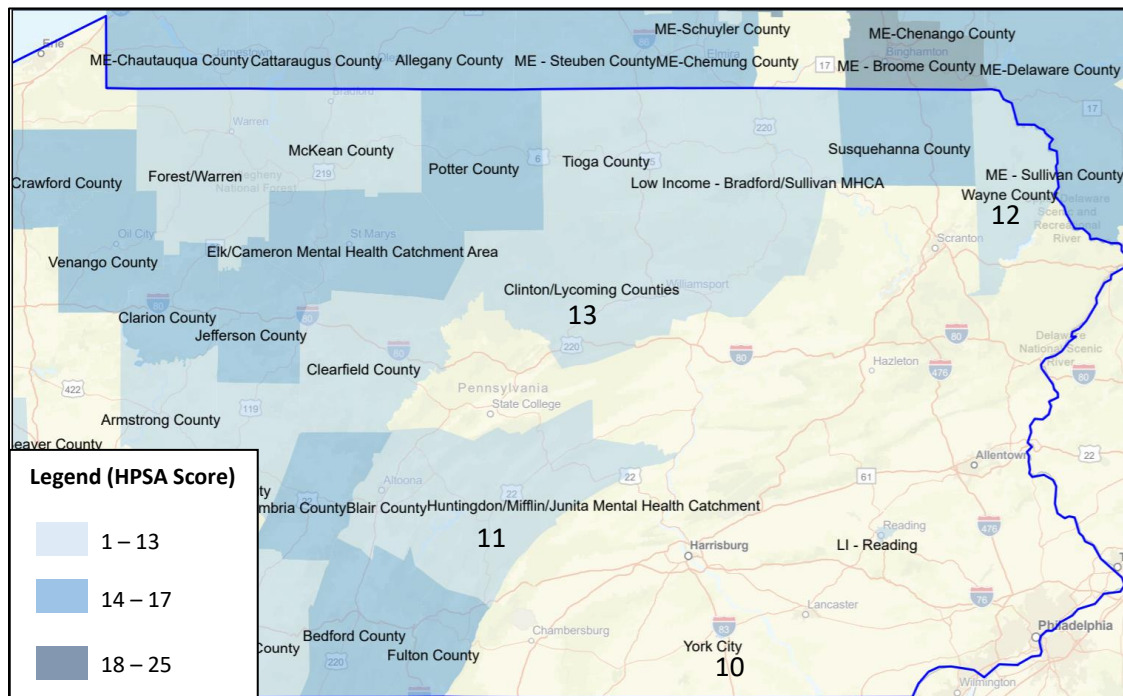
Provider Availability Data



*Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, and mental health providers that treat alcohol and other drug abuse, among other providers.

**Note: Geisinger Medical Center is located in Montour County; the county's 2019 provider rate was 515.4.

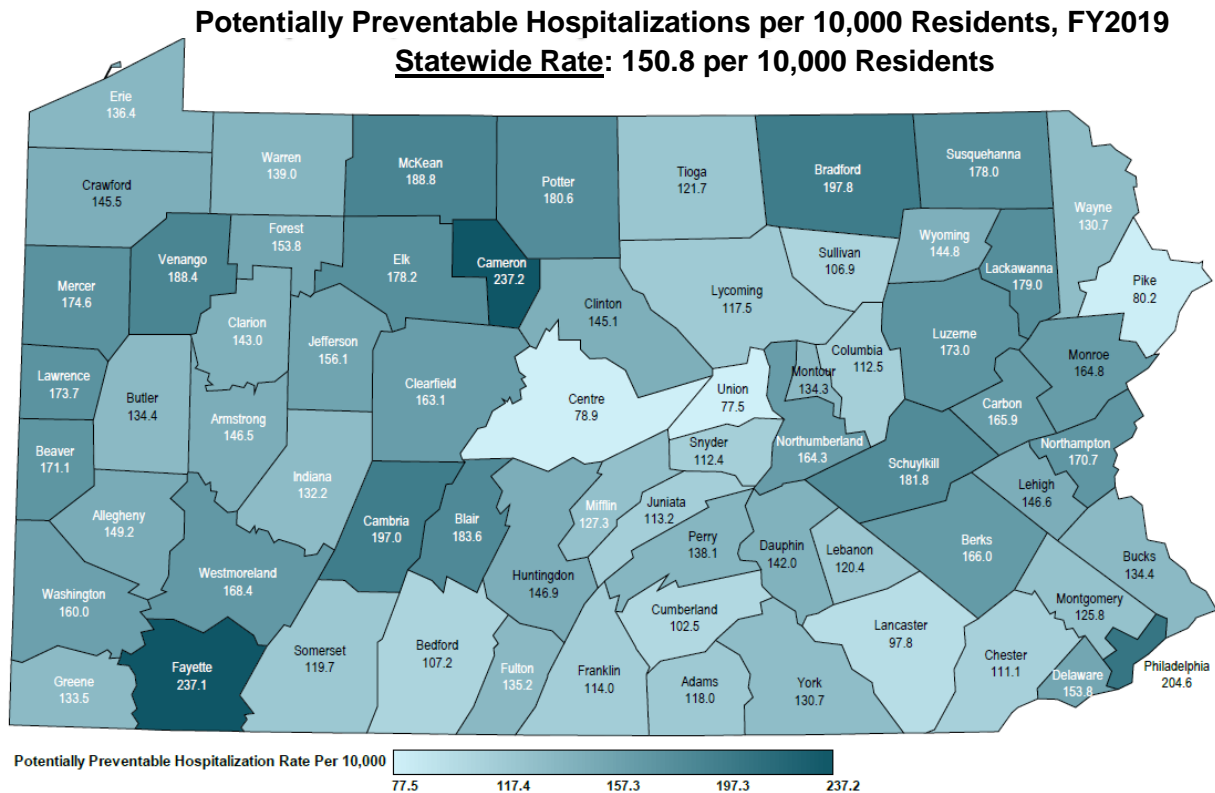
Mental Health Professional Shortage Areas (HPSA) HPSA Scores Noted within CHNA Service Counties



Source: Health Resources & Services Administration

*Mental health HPSAs can receive a score between 0-25 with 25 indicating the highest need.

Preventable Hospitalizations Data



Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019
 *PHC4 defines potentially preventable hospitalizations as, "Inpatient stays for select conditions that might have been avoided with effective primary or preventive care—thereby avoiding the need for a more expensive hospital admission."

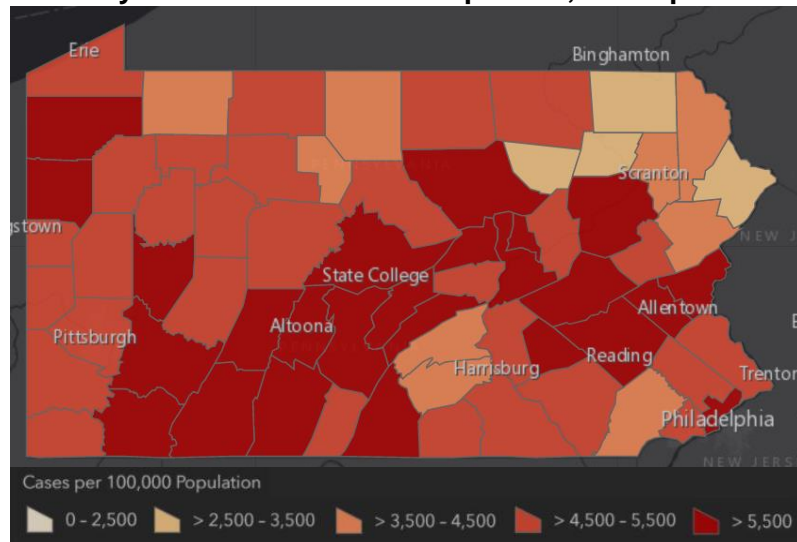
Statewide Potentially Preventable Hospitalizations by Condition, FY2019

	Number of Cases	Percent of Cases	Total Number of Hospital Days
Heart Failure	54,676	35.7%	284,232
COPD or Asthma (adults age 40+)	28,742	18.8%	116,136
Pneumonia	20,472	13.4%	87,354
Urinary Tract Infection	13,974	9.1%	51,454
Diabetes – Long-term Complications	10,641	6.9%	61,254
Diabetes – Short-term Complications	8,387	5.5%	29,718
Hypertension	6,142	4.0%	19,430
Diabetes – Uncontrolled	4,824	3.1%	16,288
Lower Extremity Amputation	3,876	2.5%	41,393
Asthma (adults age 18-39)	1,502	1.0%	4,039
Total	153,236	100%	711,298

Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

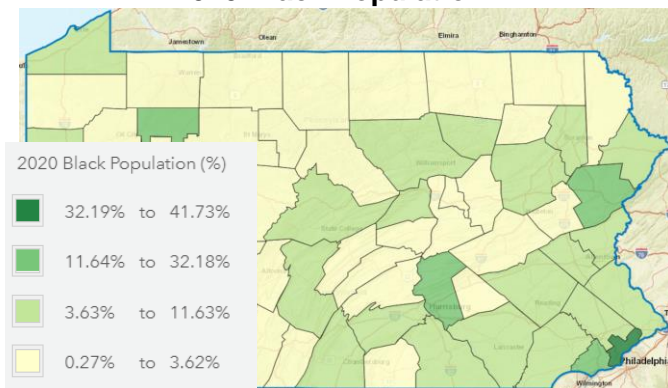
COVID-19 Data

Pennsylvania COVID-19 Cases per 100,000 Population

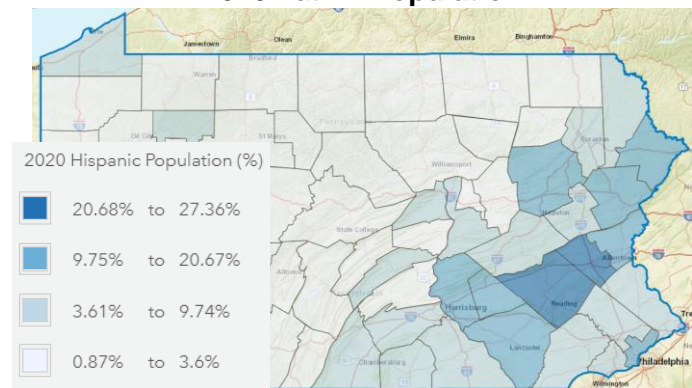


Source: Pennsylvania Department of Health, January 3, 2021

2020 Black Population



2020 Latinx Population



COVID-19 Age-Adjusted Death Rate per 100,000 by Race and Ethnicity

	Black	Latinx	White	Asian
PA	137.5	57.8	80.0	50.0
US	166.3	168.4	62.3	63.5

Source: American Public Media Research Lab, December 8, 2020

Central Region COVID-19 Cases

	Cases	Cases per 100,000	Deaths	Deaths per 100,000
Columbia County	2,947	4,536.4	75	114.6
Montour County	1,153	6,324.7	25	137.1
Northumberland County	5,225	5,751.7	236	259.1
Schuylkill County	8,491	6,006.7	252	177.4
Snyder County	1,967	4,872.2	44	108.5
Union County	3,001	6,680.3	44	98.2

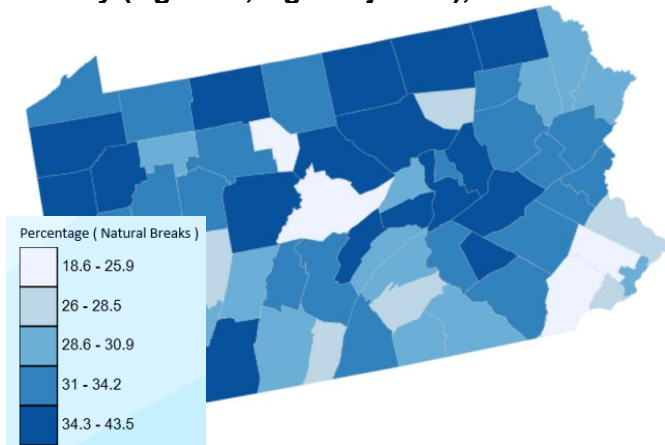
Source: Pennsylvania Department of Health, January 3, 2021

Chronic Disease and Health Risk Factors Key Findings

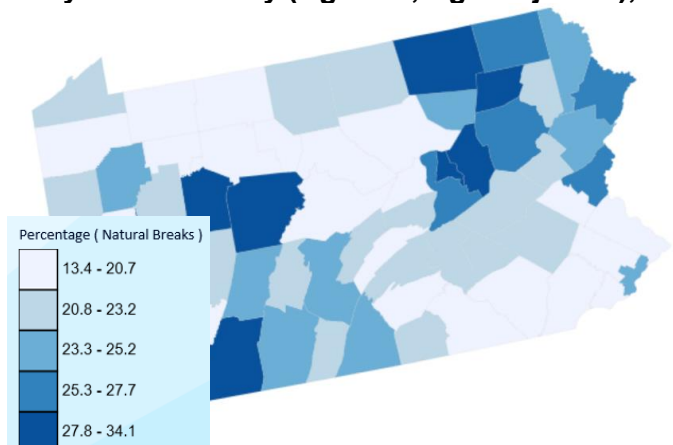
- > Socioeconomic barriers have a direct impact on health. Pennsylvania counties with a lower median income and fewer opportunities for physical activity generally have higher rates of obesity and conditions like diabetes and heart disease. This trend is reflected in the Central Region, particularly in Columbia, Northumberland, and Schuylkill counties.
- > All Central Region counties except Union have a higher prevalence of adult obesity than the state and nation. Columbia, Northumberland, Schuylkill, and Snyder counties have the highest prevalence of adult obesity, and a higher prevalence of adult diabetes. Adult obesity and diabetes are generally on the rise in all four counties. It is worth noting that while Union County has a lower prevalence of adult obesity and diabetes, the diabetes death rate increased 9 points in recent years and exceeds state and national averages.
- > Youth obesity is also higher in the Central Region. As of the 2017-2018 school year, 20% (Union) to 26% (Columbia, Northumberland) of students in grades 7-12 were obese compared to 19.5% of their peers statewide. Consistent with adult obesity trends, Columbia, Northumberland, Schuylkill, and Snyder counties saw the largest increase in youth obesity.
- > Adult smoking continued to decline across the nation, but increased in PA and the Central Region from 2016 to 2017. This trend may be due in part to vaping and e-cigarette use. Union County saw the greatest increase in adult smoking (2 points), but Northumberland and Schuylkill counties continue to have the highest percentage of adult smokers. Northumberland and Schuylkill counties also have higher death rates due to both CLRD and lung cancer compared to the state and nation. It is worth noting that Columbia and Montour counties also have higher rates of death due to CLRD.
- > Youth are particularly vulnerable to vaping/e-cigarette trends. Across PA, approximately 19% of youth report vaping/e-cigarette use. The percentage is higher in Columbia, Northumberland, and Schuylkill counties. However, all counties with reportable data saw significant increases in youth vaping/e-cigarette use from 2015 to 2019.
- > Heart disease and cancer continue to be the leading causes of death statewide and nationally. While heart disease death rates are generally declining, they remain higher in Columbia, Northumberland, and Schuylkill counties. Cancer death rates increased in nearly all counties and currently exceed state and national benchmarks in all counties except Snyder and Union. Schuylkill County has the highest overall cancer death rate. Across the state and nation, Black residents continue to have disproportionately higher death rates due to both heart disease and cancer, among other chronic conditions.
- > Asthma is the most prevalent chronic condition among youth. Snyder County is the only county with a higher prevalence of youth asthma than the state.
- > Union County overall has positive health outcomes, including lower obesity and tobacco use and lower rates of death due to most chronic conditions. In contrast, notable disparities exist within Columbia, Northumberland, and Schuylkill counties, where residents have the highest obesity and tobacco use in the region and among the highest death rates.

Health Risk Factors Data

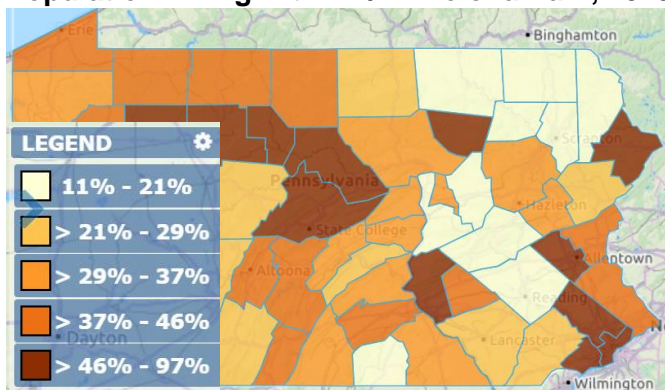
Obesity (Age 20+, Age-Adjusted), 2017



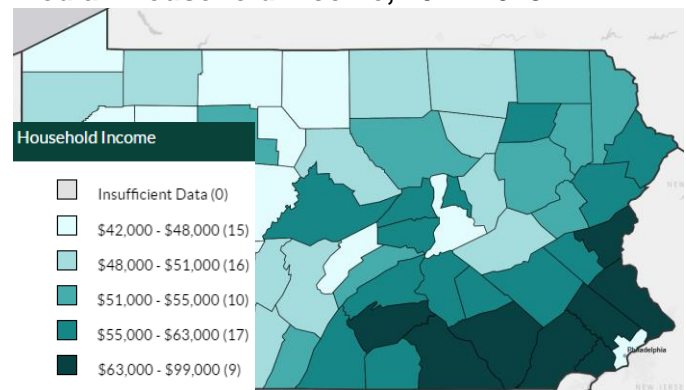
Physical Inactivity (Age 20+, Age-Adjusted), 2017



Population Living within 1/2 Mile of a Park, 2015



Median Household Income, 2014-2018



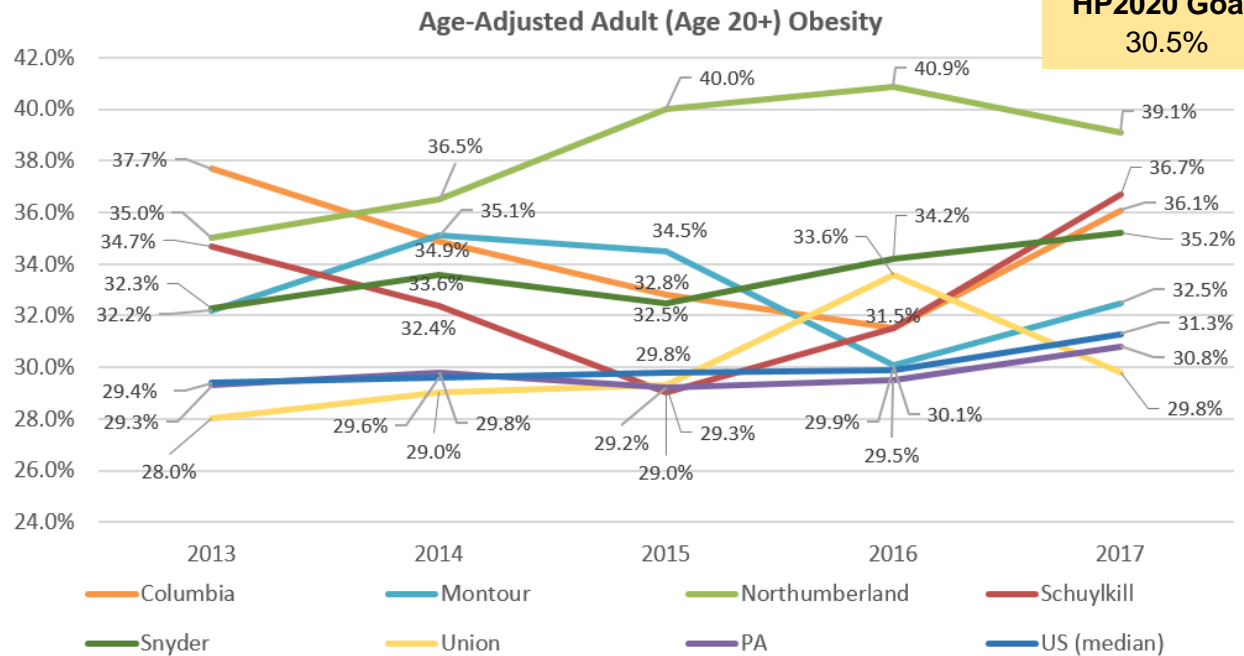
Age-Adjusted Adult (Age 20+) Health Risk Factors and Social Determinants of Health

	Obesity	Physical Inactivity	Population Living within a ½ Mile of a Park	Median Household Income
Columbia County	36.1%	32.7%	10%	\$49,889
Montour County	32.5%	30.5%	33%	\$57,183
Northumberland County	39.1%	26.4%	16%	\$47,063
Schuylkill County	36.7%	23.2%	6%	\$49,190
Snyder County	35.2%	22.2%	3%	\$57,638
Union County	29.8%	19.3%	13%	\$56,026
PA	30.8%	23.9%	47%	\$59,445
US (median)	31.3%	25.6%	NA	\$60,293

Source: Centers for Disease Control and Prevention

*Green highlighting indicates positive socioeconomic *and* health outcomes in comparison to the state and nation; red highlighting indicates negative outcomes.

Health Risk Factors Data



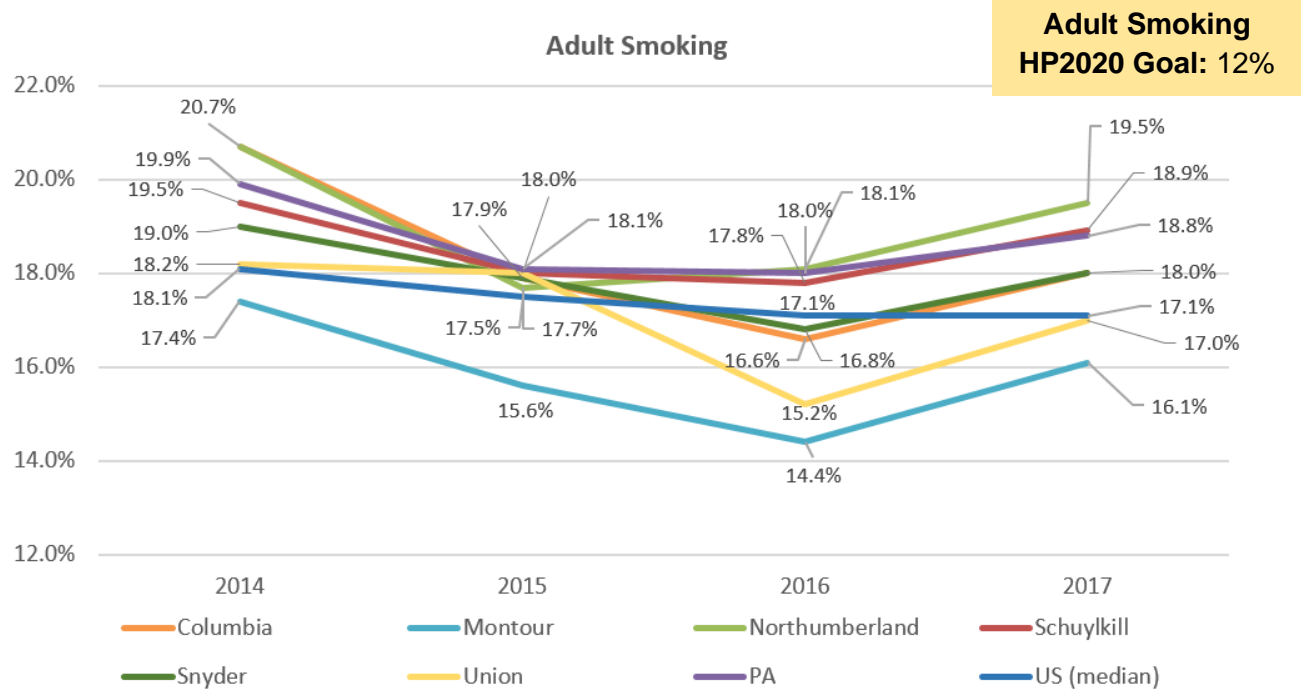
Youth Obesity by School Year

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA
Grades K-6							
2017-2018	20.8%	17.4%	21.0%	21.1%	20.2%	15.9%	16.8%
2016-2017	20.7%	17.2%	21.3%	20.6%	20.1%	16.9%	16.4%
2015-2016	20.4%	17.7%	21.0%	19.3%	19.4%	17.2%	16.7%
2014-2015	20.7%	18.3%	20.1%	19.8%	19.4%	15.3%	16.5%
2013-2014	19.7%	17.7%	21.1%	19.4%	19.1%	15.8%	16.3%
Grades 7-12							
2017-2018	26.3% ▲	22.3%	26.2%	24.3% ▲	24.4% ▲	20.2%	19.5%
2016-2017	25.0%	21.1%	23.8%	22.3%	26.6%	18.9%	18.9%
2015-2016	25.2%	22.0%	25.2%	23.5%	25.5%	19.1%	19.1%
2014-2015	24.4%	21.5%	23.8%	22.7%	22.6%	19.9%	18.6%
2013-2014	23.8%	21.0%	24.3%	21.3%	21.3%	19.2%	18.2%

Source: Pennsylvania Department of Health

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2013-2014.

Health Risk Factors Data



Source: Centers for Disease Control and Prevention

Youth Tobacco Use (Grades 6, 8, 10, 12)

	Columbia County	Northumberland County	Schuylkill County	Snyder County	Union County	PA
Cigarette use within Past 30 Days						
2019	5.5%	4.5%	5.1% ▼	NA	3.0%	3.5%
2017	6.8%	6.8%	7.7%	5.4%	4.7%	5.6%
2015	4.5%	5.3%	7.7%	NA	NA	6.4%
Vaping/E-cigarette use within Past 30 Days						
2019	19.6% ▲	19.6% ▲	23.4% ▲	NA	15.2% ▲	19.0%
2017	14.1%	13.3%	19.1%	10.1%	12.6%	16.3%
2015	12.9%	14.1%	17.0%	NA	NA	15.5%

Source: Pennsylvania Commission on Crime and Delinquency

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2015 or 2017 (Union).

**Montour and Snyder county data are not reported or limited due to low school district participation.

Chronic Disease Data

Leading Chronic Disease Causes of Death, Age-Adjusted Death Rates per 100,000

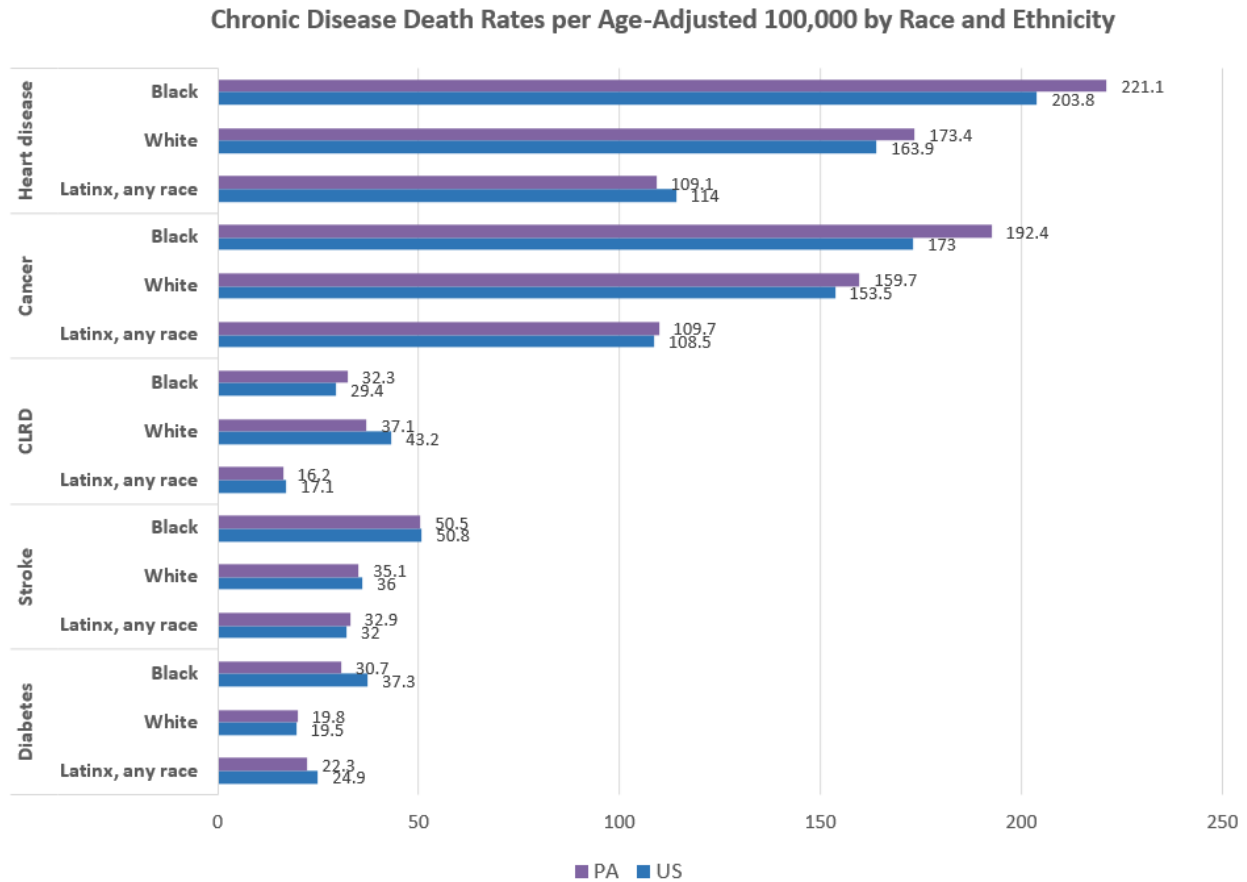
	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA	US
Heart Disease								
2018	180.4 ▼	126.1 ▼	218.4 ▼	238.5 ▼	167.0 ▲	135.2 ▼	176.1	163.6
2017	204.9	101.9	203.9	244.9	143.6	165.4	176.0	165.0
2016	173.4	140.3	189.7	254.4	118.3	142.9	176.2	165.5
2015	236.2	139.7	200.6	251.2	137.2	124.5	177.8	168.5
2014	219.7	138.0	232.2	243.9	144.1	139.0	175.8	167.0
Cancer								
2018	177.7 ▲	177.1	167.9 ▲	192.2 ▲	138.0 ▼	151.3 ▲	156.6	149.1
2017	158.5	155.9	168.9	193.9	132.0	134.9	161.0	152.5
2016	153.0	142.1	188.9	198.0	144.0	115.8	164.7	155.8
2015	155.5	172.2	162.9	195.1	140.9	135.9	167.2	158.5
2014	171.0	177.9	154.8	184.9	146.7	148.3	169.6	161.2
Chronic Lower Respiratory Disease (CLRD)								
2016-2018	42.8	46.9	41.6	43.1 ▼	26.6 ▼	24.2 ▼	36.3	40.4
2015-2017	38.3	41.7	43.9	47.9	30.5	29.6	37.3	41.0
2014-2016	41.8	46.1	43.4	49.5	34.2	26.2	37.3	40.9
Stroke								
2016-2018	30.6	32.8	28.2 ▼	41.7	30.6	25.1 ▼	36.2	37.3
2015-2017	29.1	31.3	33.8	38.8	30.1	31.1	37.4	37.5
2014-2016	30.0	32.7	33.9	40.1	30.1	34.9	37.5	37.2
Diabetes								
2016-2018	12.2 ▼	21.3	23.3 ▲	16.5	20.1 ▲	22.5 ▲	20.5	21.3
2015-2017	11.9	NA	19.1	16.8	14.9	18.5	21.1	21.2
2014-2016	16.1	NA	18.8	18.0	15.8	13.3	21.5	21.1

Source: Centers for Disease Control and Prevention

*Death rates for CLRD, stroke, and diabetes are shown as a 3-year aggregate due to lower death counts.

**Green highlighting indicates a lower rate than the state and nation; red highlighting indicates a higher rate. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2014/2014-2016.

Chronic Disease Data



Source: Centers for Disease Control and Prevention, 2016-2018

*Data for Central Region counties are not reported due to low death counts.

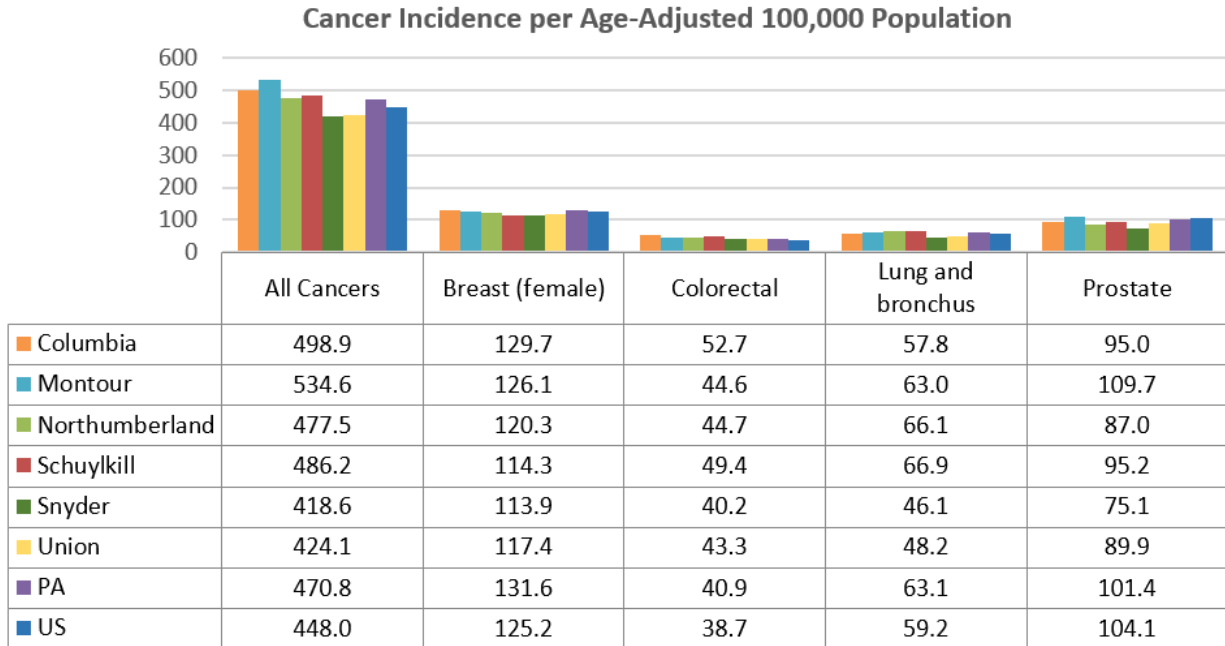
Youth Chronic Disease Prevalence

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA
Asthma							
Total students	946	148	917	1,088	577	322	206,712
Percent	9.6%	6.3%	7.8%	5.7%	12.1%	8.1%	11.3%
Type II Diabetes							
Total students	3	1	15	12	4	0	1,052
Percent	0.03%	0.04%	0.13%	0.06%	0.08%	0.0%	0.06%

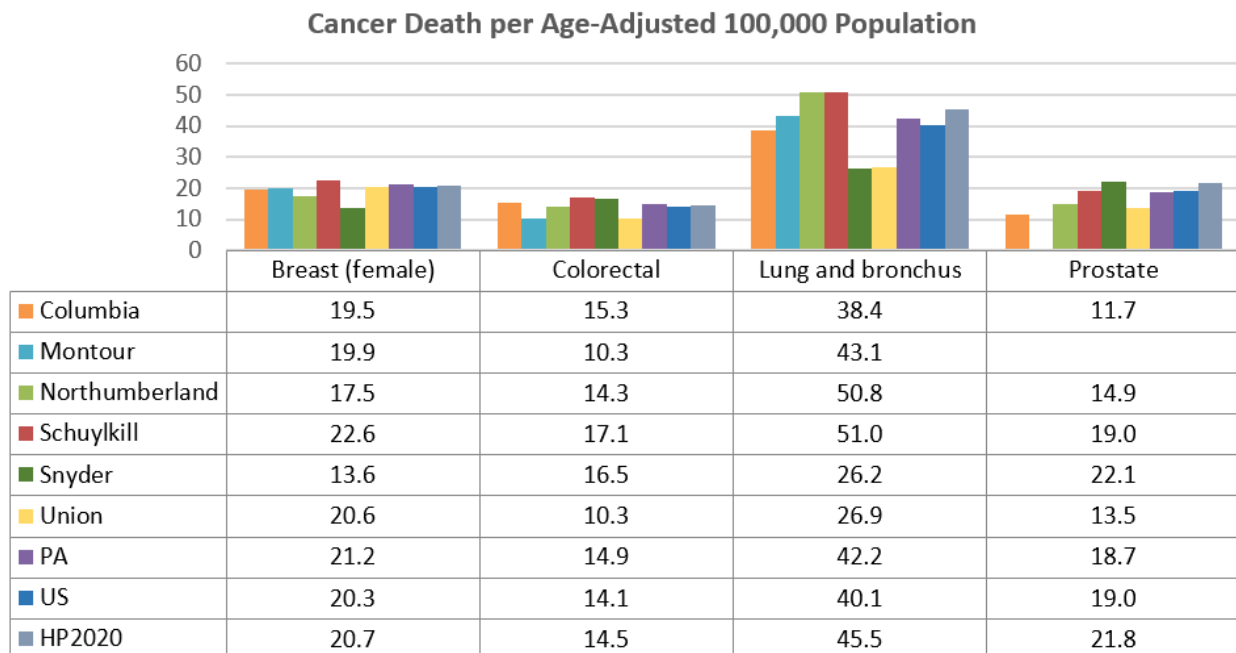
Source: Pennsylvania Department of Health, 2017-2018

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage.

Chronic Disease Data



Source: Pennsylvania Department of Health, 2013-2017; Centers for Disease Control and Prevention, 2012-2016 (most recent available)

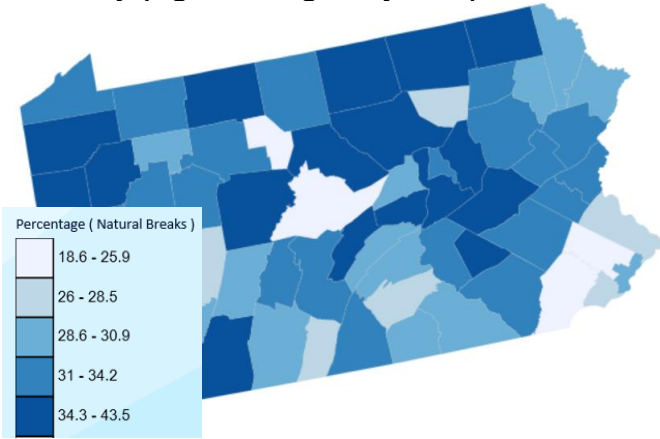


Source: Pennsylvania Department of Health, 2013-2017; Centers for Disease Control and Prevention, 2013-2017

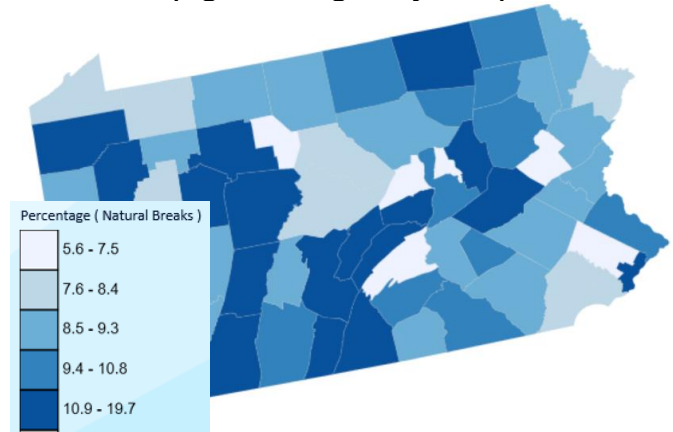
*A Montour County prostate cancer death rate is not reported due to a low death count.

Chronic Disease Data

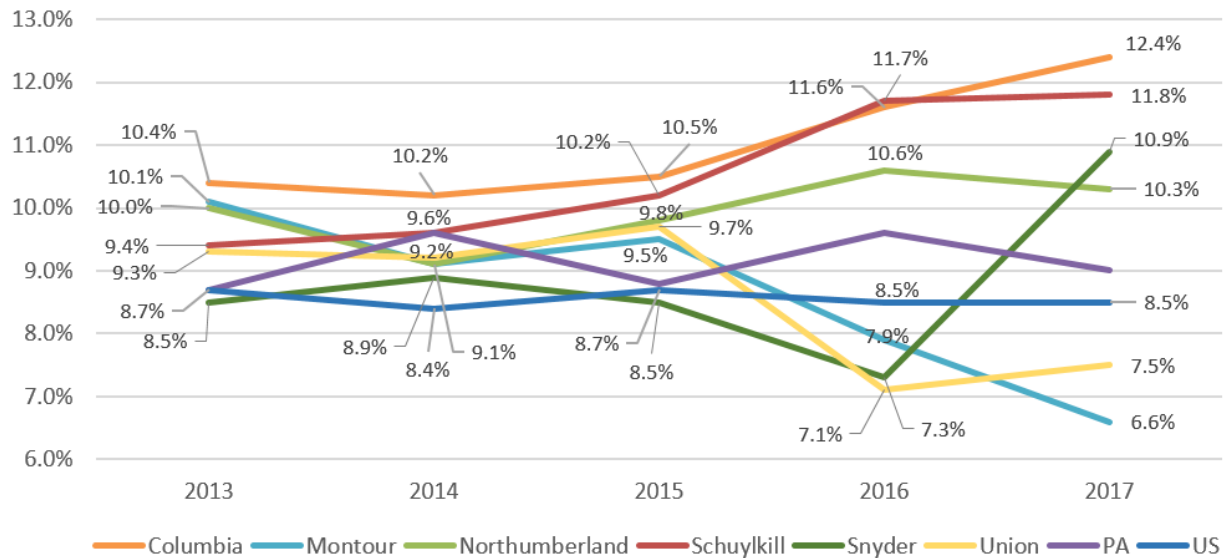
Obesity (Age 20+, Age-Adjusted), 2017



Diabetes (Age 20+, Age-Adjusted), 2017



Age-Adjusted Adult (Age 20+) Diabetes



Source: Centers for Disease Control and Prevention

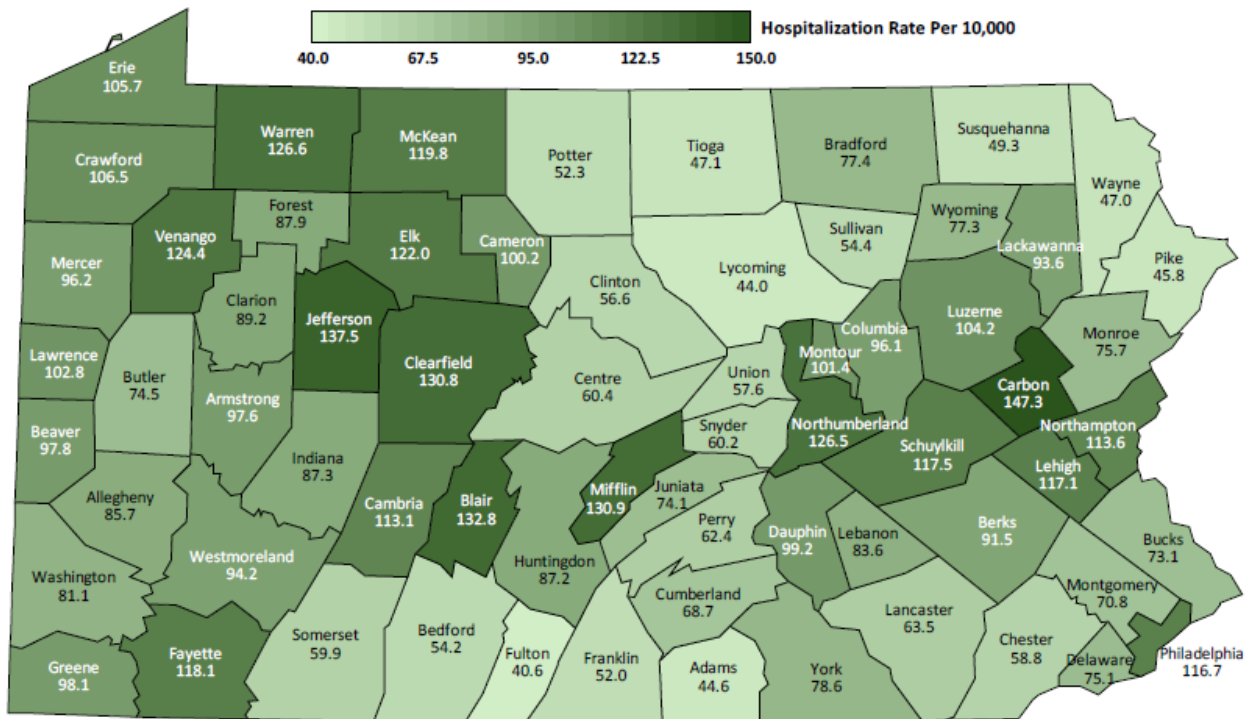
Behavioral Health Key Findings

- > Across the state in 2018, there were 113,704 hospital stays for mental disorders for a rate of 88.8 per 10,000 residents. Depression diagnoses accounted for nearly 44% of all mental disorders hospitalizations. About half of all patients were between the ages of 18-44 and one-third were ages 45-64.
- > All Central Region counties except Snyder and Union have a higher rate of mental disorders hospitalizations than the state. Northumberland County has the highest rate, followed by Schuylkill County. Schuylkill County also has a high suicide death rate that exceeds state and national benchmarks by more than 10 points. Mental distress in Northumberland and Schuylkill counties may be partially attributed to socioeconomic barriers. Statewide, mental disorder hospitalizations were approximately 3 times higher in areas of high poverty and low educational attainment.
- > The Columbia County suicide death rate also increased in recent years and exceeds state and national benchmarks, although to a lesser degree than Schuylkill County.
- > The PA Health Care Cost Containment Council reports that across PA from 2016 to 2017, “the number of hospitalizations for opioid overdose increased from 3,342 to 3,500—a 4.7% increase. In 2018, the number dropped to 2,667—a 23.8% decrease from 2017.” The percentage of overdoses due to pain medication increased from 2017 to 2018, while the percentage due to heroin decreased. Opioid overdose hospitalizations were more prevalent in areas of socioeconomic distress.
- > Opioid overdose hospitalization rates per 10,000 are only reported for Northumberland and Schuylkill counties. The Northumberland County rate (28.8) exceeds the state rate (25.1), but the Schuylkill County rate is lower (22.7). However, of note, Schuylkill County continued to have a higher number of deaths due to overdose than other Central Region counties. While the number of deaths generally declined from 2018 to 2019 across the full 15-county CHNA service region, they remained consistent in Schuylkill County.
- > Neonatal abstinence syndrome (NAS) is another indicator of the prevalence and impact of opioid use disorder. A positive finding is that all Central Region counties have a lower rate of NAS in comparison to the state.
- > Adult excessive drinking increased in all Central Region counties from the 2018 CHNA, although the increase was marginal for all counties except Union. Union County saw a nearly 3-point increase in adult excessive drinking and leads the region at 22% of adults. Union County also leads the region in the percentage of driving deaths due to alcohol impairment (44% vs. the statewide average of 27%). Of note, Union County also saw an increase in youth alcohol use from 2017 to 2019.
- > Among Central Region counties with reportable data, 35% or more of youth report consistent feelings of depression, with higher, increasing percentages in Union and Schuylkill counties. Schuylkill County also has a higher percentage of youth who have attempted suicide, along with Northumberland and Columbia counties. A positive finding is that Central Region youth are generally less likely to use substances, although Columbia and Union counties saw increases in marijuana and alcohol use, respectively.

Behavioral Health Data

Hospitalizations for Mental Disorders per 10,000 Residents, 2018

Statewide Rate: 88.8 per 10,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Mental Disorders Hospitalizations per 10,000 by Socioeconomic Factors, 2018

Pennsylvania	
Poverty Rate	
Areas of high poverty (>25% of population)	163.3
Areas of low poverty (≤5% of population)	53.0
Education	
Areas of low education (≤10% with a bachelor's degree)	159.4
Areas of higher education (≥40% with a bachelor's degree)	58.4
Race/Ethnicity	
Black, Non-Hispanic	154.0
White, Non-Hispanic	81.7
Hispanic/Latinx	67.9

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Behavioral Health Data

Mental Disorders Hospital Stays, 2018

	Pennsylvania (Total Hospital Stays: 113,704)
Treatment Setting	
Acute care hospital	56.4%
Psychiatric hospital	43.6%
Average Length of Stay	
Acute care hospital	8.6 days
Psychiatric hospital	12.3 days
Type of Mental Disorder	
Depression	44.0%
Schizophrenia	20.7%
Bipolar	20.2%
Other (conduct, anxiety, somatic, miscellaneous)	7.3%
Suicidal	4.2%
Trauma (adjustment, post-traumatic stress and dissociative disorders)	3.6%
Patient Age	
Under 18 years	14.8%
18-44 years	50.8%
45-64 years	27.2%
65-74 years	4.7%
75 years or over	2.6%

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Suicide Death per Age-Adjusted 100,000 Population

**Suicide Death
HP2020 Goal: 10.2**

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA	US
2016-2018	17.5 ▲	NA (n=11)	14.2	25.0	NA (n=14)	NA (n=15)	14.9	13.9
2015-2017	18.9	NA**	13.8	25.7	NA (n=14)	NA (n=13)	14.6	13.6
2014-2016	15.1	NA**	15.5	23.2	NA (n=13)	NA (n=14)	14.0	13.2

Source: Centers for Disease Control and Prevention

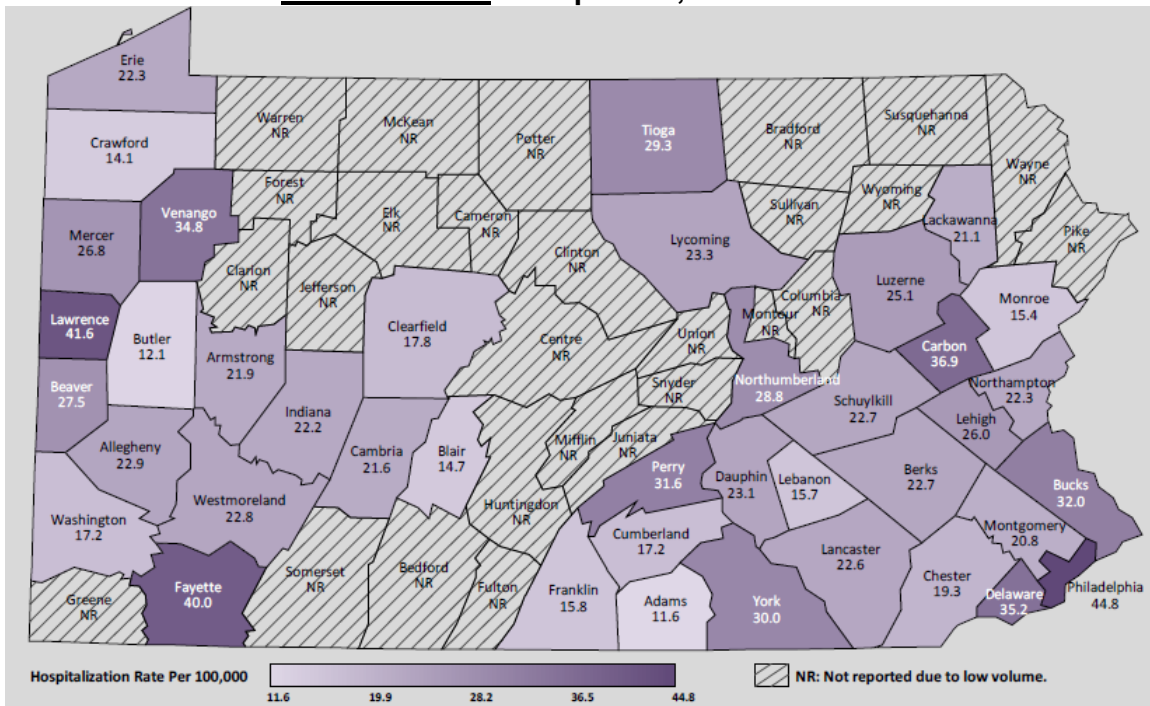
*Green highlighting indicates a lower rate than the state and nation; red highlighting indicates a higher rate. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2014-2016.

**A death count is not reportable.

Behavioral Health Data

Opioid Overdose Hospitalizations per 100,000 Residents, 2018

Statewide Rate: 25.1 per 100,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Opioid Overdose Hospitalizations, 2018

	Pennsylvania
Total Hospitalizations	
2018	2,667
2017	3,500
2016	3,342
Heroin Overdose Admissions	
2018	1,115 (41.8%)
2017	1,753 (50.1%)
2016	1,555 (46.5%)
Pain Medication Overdose Admissions	
2018	1,552 (58.2%)
2017	1,747 (49.9%)
2016	1,787 (53.5%)

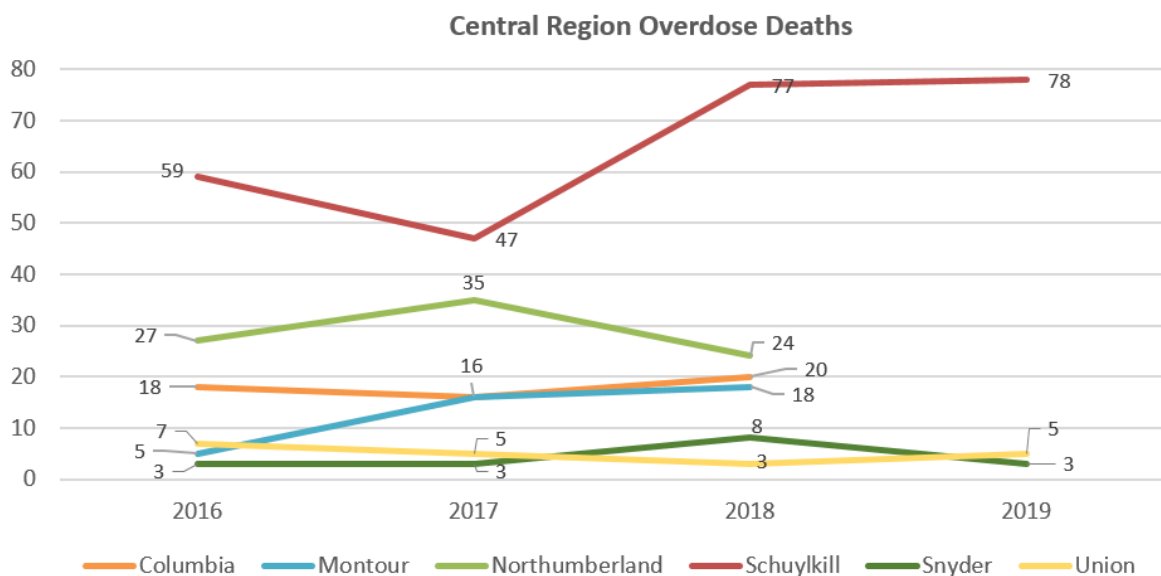
Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Behavioral Health Data

Opioid Overdose Hospitalizations per 100,000 by Socioeconomic Factors, 2018

	Pennsylvania
Income	
Low-income areas (avg. less than \$30,000)	54.4
High-income areas (avg. \$90,000 or higher)	17.3
Education	
Areas of low education (≤10% with a bachelor's degree)	46.2
Areas of higher education (≥60% with a bachelor's degree)	14.6
Race/Ethnicity	
Black, Non-Hispanic	28.9
White, Non-Hispanic	25.2
Hispanic/Latinx	20.0

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018



Source: OverdoseFreePA

*Data are reported as available through 2019.

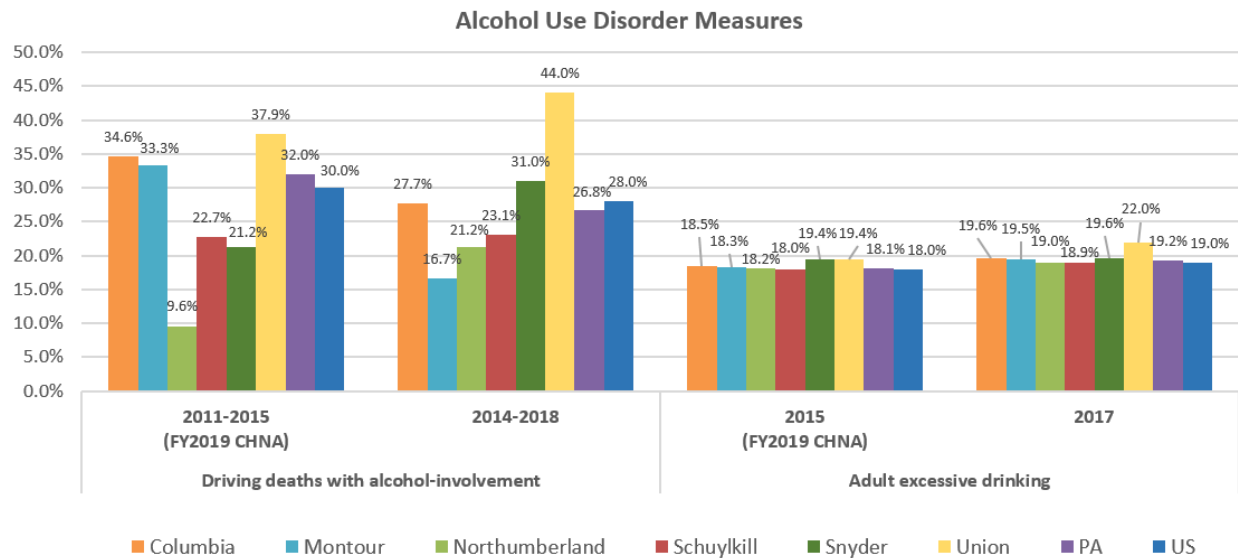
Neonatal Abstinence Syndrome (NAS), FY2019

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA
Number of NAS stays	NA	NA	NA	12	NA	NA	1,733
Rate per 1,000 newborn stays	11.3	NA	10.9	10.4	11.9	6.1	13.8

Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

*PHC4 defines NAS as "An array of withdrawal symptoms that develops soon after birth in newborns exposed to addictive drugs (e.g., opioids) while in the mother's womb."

Behavioral Health Data



Source: Centers for Disease Control and Prevention & National Highway Safety Administration

Youth Behavioral Health Measures (Grades 6, 8, 10, 12)

	Columbia County	Northumberland County	Schuylkill County	Snyder County	Union County	PA
Sad or Depressed Most Days in the Past Year						
2019	35.1% ▲	38.7% ▼	40.6% ▲	NA	43.3% ▲	38.0%
2017	38.2%	41.2%	38.2%	30.8%	37.3%	38.1%
2015	31.8%	42.2%	37.6%	NA	NA	38.3%
Attempted Suicide						
2019	10.5% ▲	11.6%	11.5% ▲	NA	9.7%	9.7%
2017	10.5%	12.7%	9.1%	7.4%	9.8%	10.0%
2015	8.2%	12.8%	9.1%	NA	NA	9.5%
Alcohol Use within Past 30 Days						
2019	14.7%	14.2%	17.3%	NA	13.8% ▲	16.8%
2017	17.4%	15.0%	19.4%	10.4%	11.7%	17.9%
2015	16.4%	12.5%	19.0%	NA	NA	18.2%
Marijuana Use within Past 30 Days						
2019	8.1% ▲	6.8%	7.6%	NA	6.1%	9.6%
2017	8.8%	7.6%	7.5%	3.6%	5.3%	9.7%
2015	5.3%	5.8%	7.4%	NA	NA	9.4%

Source: Pennsylvania Commission on Crime and Delinquency

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2015 or 2017 (Union).

**Montour and Snyder county data are not reported or are limited due to low school district participation.

Maternal and Child Health Key Findings

- > Schuylkill and Union counties maintained a similar birth rate from the 2018 CHNA, but all other Central Region counties experienced a decline consistent with statewide trends. All counties except Montour and Snyder have a lower birth rate than the state overall. Births by race and ethnicity are consistent with current and projected county demographics with approximately 90% or more of births to White mothers.
- > The percentage of births to teens is higher in all Central Region counties except Montour when compared to the state. While teen births declined statewide from the 2018 CHNA, teen birth percentages in the Central Region have been largely consistent.
- > The percentage of pregnant women receiving first trimester prenatal care is lower in all Central Region counties compared to the state and nation. Columbia, Northumberland, Snyder, and Union counties have seen significant declines in women accessing early prenatal care in recent years.
- > Despite lower prenatal care access, all Central Region counties except Columbia have a lower percentage of low birth weight babies compared to the state and nation. Columbia County saw significant increases in both low birth weight and preterm births in 2018. Montour County also saw an increase in preterm births, although statistics for the county historically fluctuate from year-to-year, likely due to low birth counts.
- > Breastfeeding varies widely across the region. While Montour, Snyder, and Union county breastfeeding percentages exceed state and national benchmarks, percentages for Columbia, Northumberland, and Schuylkill counties are lower and declining. Declines were primarily seen within the last year and should continue to be monitored.
- > Pennsylvania has a higher percentage of women who report smoking during pregnancy compared to the nation overall, although the percentage is declining. The percentage is also declining across the Central Region, but remains higher in all counties except Union when compared to state and national averages. Consistent with higher overall adult smoking rates, Northumberland and Schuylkill counties have the highest percentage of pregnant women who report smoking.
- > Columbia, Northumberland, and Schuylkill counties experience notable maternal and child health disparities related to prenatal care access, low birth weight, breastfeeding, and/or smoking. Consistent with this finding, the infant death rate for these counties increased and/or exceeds state and national rates.
- > As demonstrated in these data, across PA and the nation, Black and/or Latina mothers experience notable maternal and child health disparities. Within PA and the US, there is a ≥ 10 -point deficit for Black and/or Latina women receiving early prenatal care compared to White women. Black and/or Latina babies are more likely to be born with low birth weight and/or premature. Of grave concern, as a national average, Black mothers are more than 2.5 times as likely as White and/or Latina mothers to die due to pregnancy-related causes. Maternal and child health data by race and ethnicity are limited within the Central Region due to small counts.

Maternal and Child Health Data

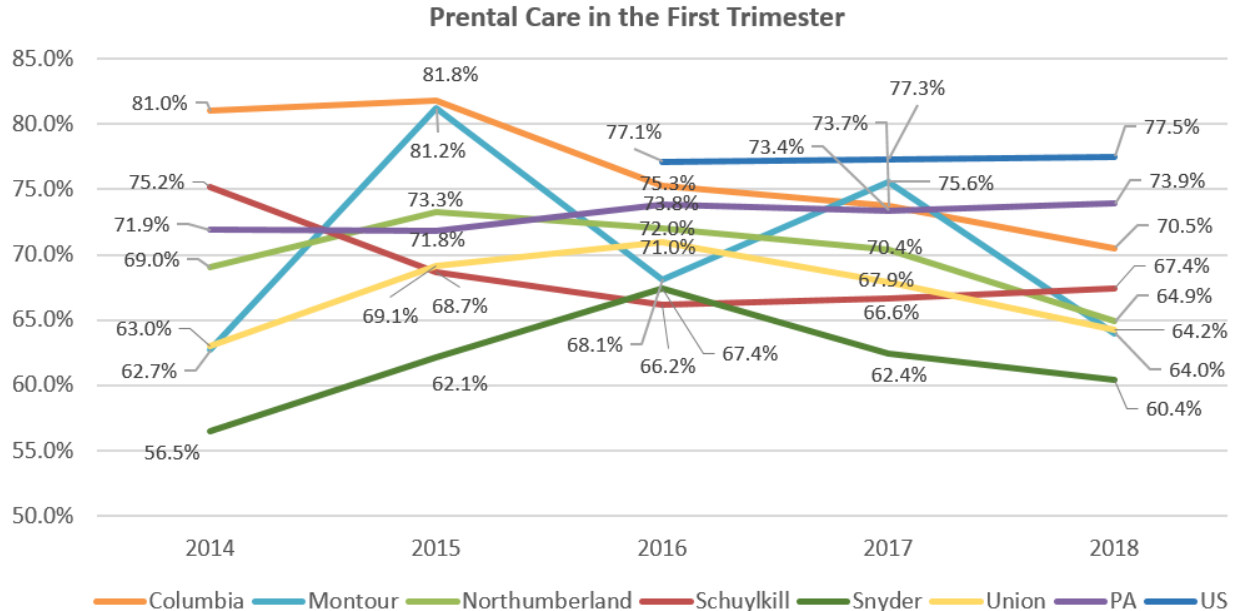
Total Births

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA
Birth Rate per 1,000							
2018	15.4	20.9	19.8	18.4	21.1	19.6	20.8
2017	15.5	22.1	20.4	19.1	21.7	19.7	21.1
2016	16.7	22.9	20.3	19.6	21.7	20.3	21.4
2015 (2018 CHNA)	16.6	22.3	20.4	18.6	22.7	19.8	21.5
2018 Births by Race and Ethnicity							
Total	522	197	895	1,275	432	401	135,677
Asian	0.8%	7.1%	0.8%	0.9%	1.2%	1.2%	4.6%
Black	1.1%	1.5%	2.3%	2.0%	0.9%	0.7%	13.9%
White	93.9%	87.3%	92.1%	90.0%	95.4%	93.5%	70.1%
Latinx	4.2%	2.5%	6.5%	11.4%	1.6%	4.2%	11.6%
Births to Teens							
2018	4.4% ▼	NA	5.8%	6.3%	5.3%	5.0%	4.1%
2017	4.5%	NA	6.6%	5.4%	3.6%	3.5%	4.3%
2016	4.0%	NA	5.1%	6.7%	4.3%	5.1%	4.6%
2015 (2018 CHNA)	7.5%	4.6%	6.6%	5.2%	4.3%	4.5%	5.1%

Source: Pennsylvania Department of Health

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2015.

Maternal and Child Health Data

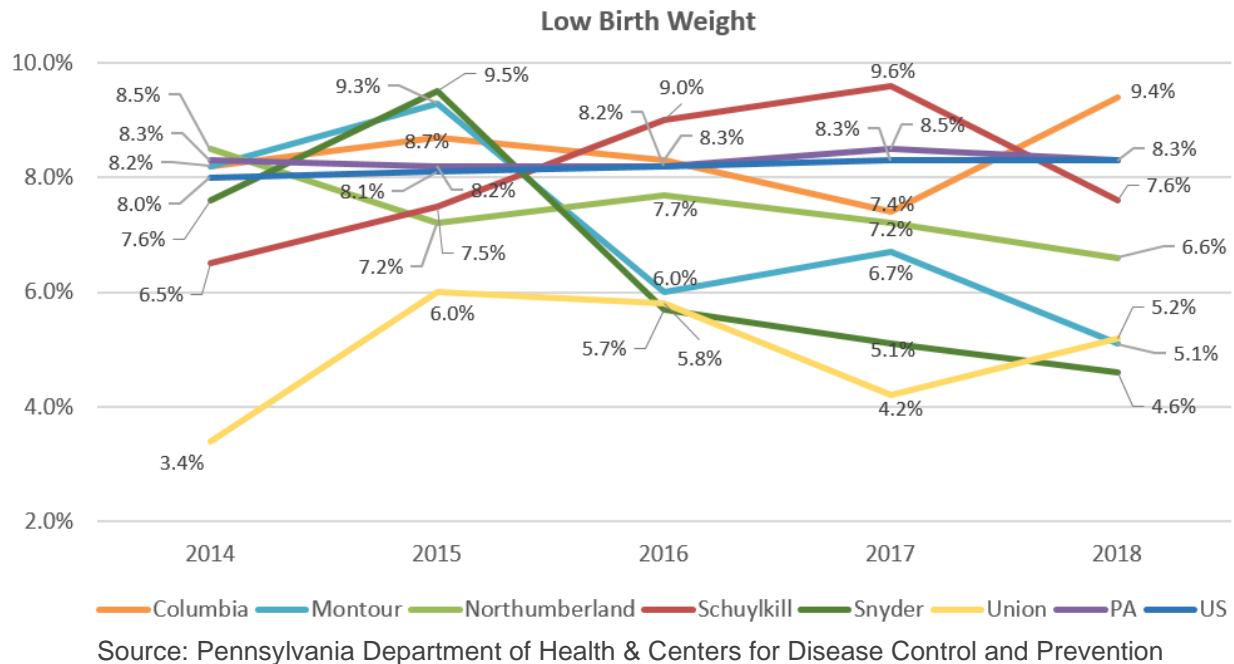


Prenatal Care in the First Trimester by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Columbia County	70.5%	NA	NA	71.5%	57.1%
Montour County	64.0%	78.6%	NA	62.8%	NA
Northumberland County	64.9%	NA	NA	66.7%	39.7%
Schuylkill County	67.4%	NA	50.0%	68.9%	51.8%
Snyder County	60.4%	NA	NA	59.7%	NA
Union County	64.2%	NA	NA	64.4%	58.8%
PA	73.9%	73.0%	64.6%	77.3%	65.3%
US	77.5%	81.8%	67.1%	82.5%	72.7%
HP2020	77.9%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
 *Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



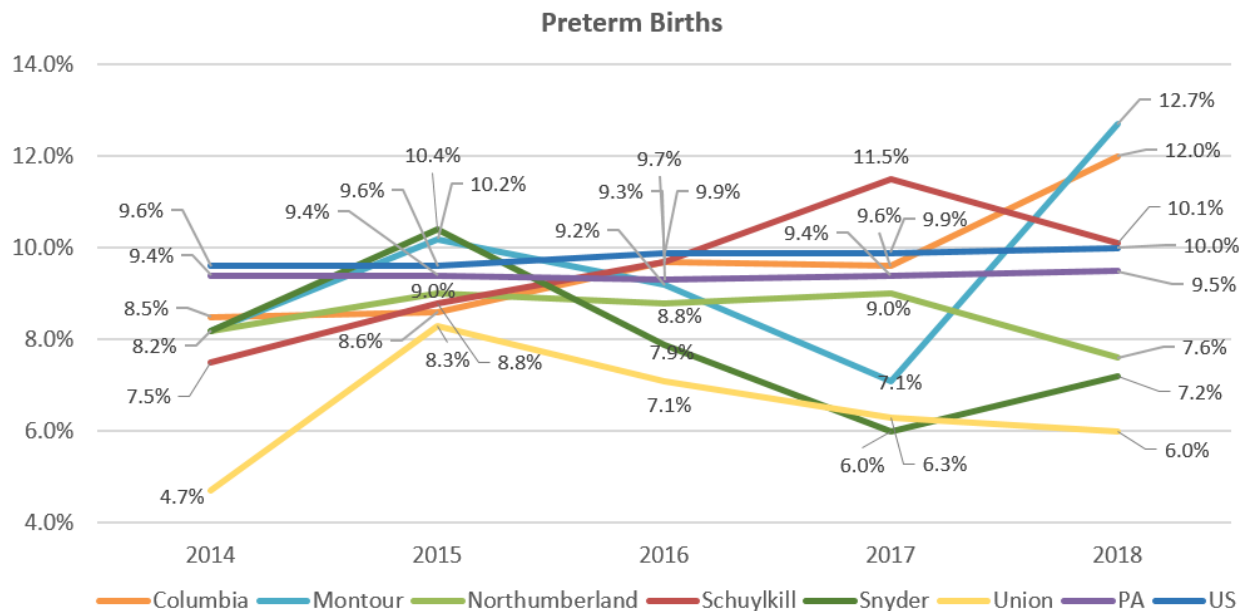
Low Birth Weight by Race and Ethnicity

	Total Births	Asian	Black	White	Latinx
Columbia County	9.4%	NA	NA	9.8%	NA
Montour County	5.1%	NA	NA	NA	NA
Northumberland County	6.6%	NA	NA	6.1%	NA
Schuylkill County	7.6%	NA	NA	7.2%	9.0%
Snyder County	4.6%	NA	NA	4.9%	NA
Union County	5.2%	NA	NA	4.8%	NA
PA	8.3%	8.8%	13.9%	7.0%	9.0%
US	8.3%	8.6%	14.1%	6.9%	7.5%
HP2020	7.8%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018

*Green highlighting indicates a lower percentage than state and national benchmarks; red highlighting indicates a higher percentage.

Maternal and Child Health Data



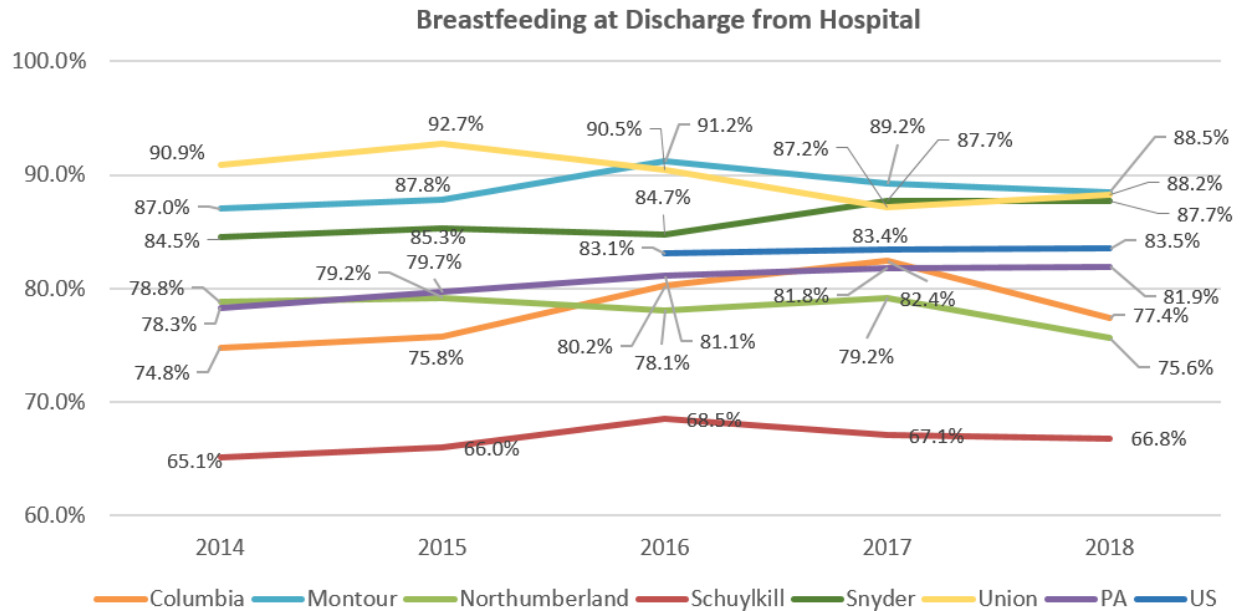
Preterm Births by Race and Ethnicity

	Total Births	Asian	Black	White	Latinx
Columbia County	12.0%	NA	NA	12.8%	NA
Montour County	12.7%	NA	NA	11.6%	NA
Northumberland County	7.6%	NA	NA	7.3%	NA
Schuylkill County	10.1%	NA	NA	10.0%	11.7%
Snyder County	7.2%	NA	NA	7.3%	NA
Union County	6.0%	NA	NA	5.9%	NA
PA	9.5%	8.1%	13.6%	8.7%	10.0%
US	10.0%	8.6%	14.1%	9.1%	9.7%
HP2020	9.4%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018

*Green highlighting indicates a lower percentage than state and national benchmarks; red highlighting indicates a higher percentage.

Maternal and Child Health Data



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

*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

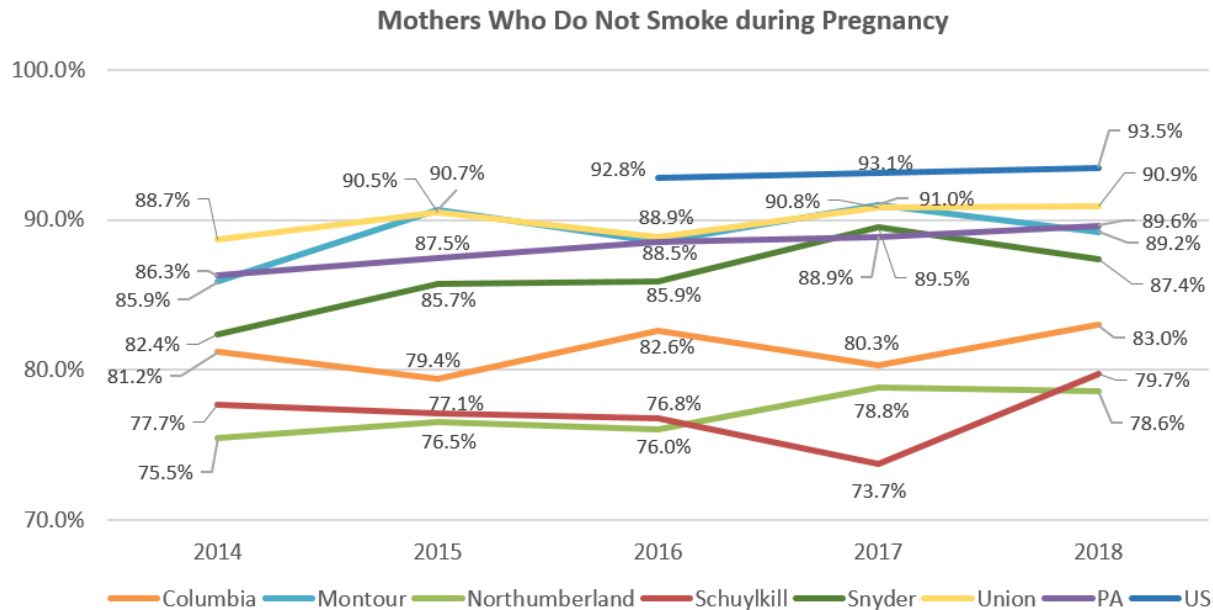
Breastfeeding at Discharge from Hospital by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Columbia County	77.4%	NA	NA	76.5%	90.9%
Montour County	88.5%	85.7%	NA	88.1%	NA
Northumberland County	75.6%	NA	72.2%	76.7%	65.3%
Schuylkill County	66.8%	100%	77.3%	66.0%	74.8%
Snyder County	87.7%	NA	NA	87.5%	NA
Union County	88.2%	NA	NA	88.8%	75.0%
PA	81.9%	92.1%	76.7%	82.4%	80.6%
US	83.5%	90.9%	72.3%	84.9%	87.1%
HP2020	81.9%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018

*Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



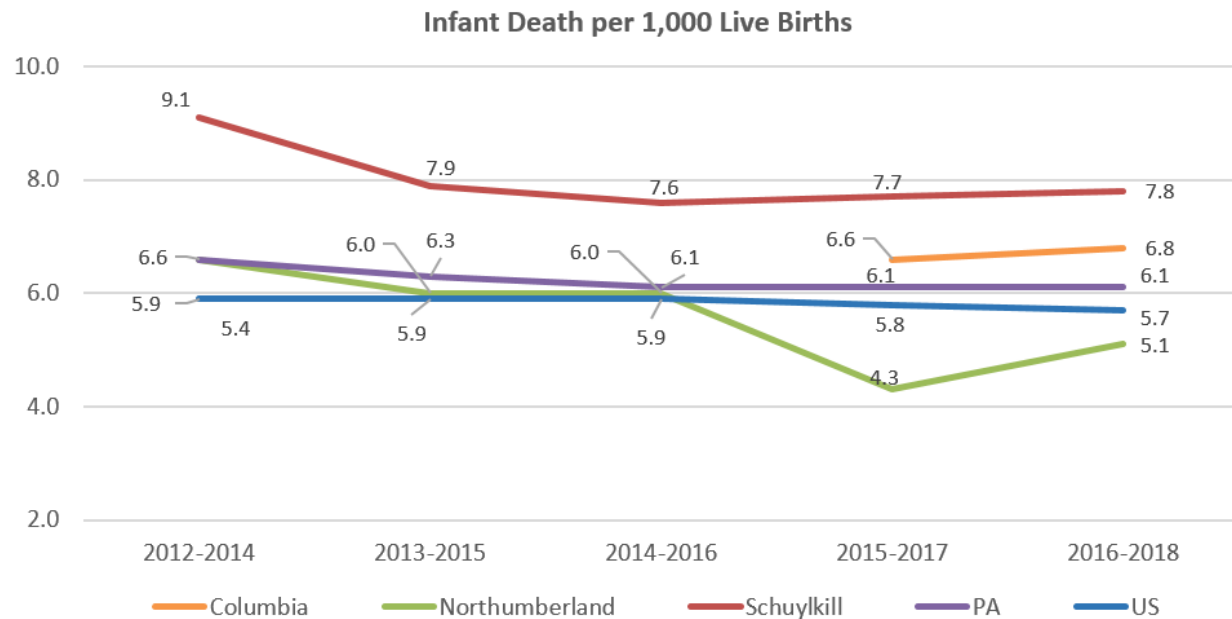
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
 *Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

Mothers Who Do Not Smoke during Pregnancy by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Columbia County	83.0%	NA	NA	82.6%	95.2%
Montour County	89.2%	100%	NA	88.8%	NA
Northumberland County	78.6%	NA	75.0%	78.1%	91.1%
Schuylkill County	79.7%	100%	80.0%	78.3%	93.1%
Snyder County	87.4%	NA	NA	87.5%	NA
Union County	90.9%	NA	NA	90.3%	100%
PA	89.6%	99.2%	91.8%	88.1%	94.6%
US	93.5%	99.5%	94.8%	90.5%	98.3%
HP2020	98.6%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
 *Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
 *Data are not reported for Montour, Snyder, and Union counties due to low death counts. Data for Columbia County are limited.

Maternal Death per 100,000 Live Births

	Total Deaths	Total Death Rate	Black Death Rate	White Death Rate	Latina Death Rate
PA	19	14.0	NA	NA	NA
US	658	17.4	37.1	14.7	11.8

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
 *Maternal deaths include deaths of women while pregnant or within 42 days of termination of pregnancy, from any cause related to pregnancy or its management.

Aging Population Key Findings

- > The Central Region is aging faster than the population statewide and nationally, and seniors are less healthy overall. All counties exceed national benchmarks for multiple chronic conditions among senior Medicare beneficiaries; Northumberland, Schuylkill, and Snyder counties also have a higher percentage in comparison to the state. Of note, Northumberland, Schuylkill, and Snyder counties have a higher percentage of seniors with 6 or more chronic conditions than both the state and nation; the percentage of seniors with 6 or more conditions increased from the 2018 CHNA for Schuylkill and Snyder counties.
- > Seniors spend more money on healthcare than any other age group, and spending increases with a higher reported number of chronic conditions. Within the Central Region, senior Medicare beneficiaries with 6 or more chronic conditions have approximately \$25,000 or more in annual expenses, with the highest spending in Schuylkill County.
- > Consistent with having a higher prevalence of comorbidities, senior Medicare beneficiaries in Northumberland, Schuylkill, and Snyder counties have a higher prevalence of 8 or more of the 12 reported chronic condition types in comparison to the state and nation. Of note, at least 4 counties in the region have a higher prevalence of the following conditions: asthma, COPD, depression, heart failure, and high cholesterol.
- > Alzheimer's disease death rates among seniors increased statewide and nationally before leveling off in recent years. Some of the increase in death rates may be due to reclassification of cause of death to Alzheimer's disease as the primary cause of death rather than the resulting acute condition e.g. pneumonia or heart failure. Within the Central Region, Montour County is the only county to have a higher Alzheimer's disease death rate than the state and nation, exceeding both by more than 150 points. Death rates are reported by county of residence; it may be worth exploring if individuals with Alzheimer's disease and their families move to Montour County as they seek care.
- > As seniors age, they are at risk for isolation due to physical limitations and decreasing social circles. One indicator of isolation is the percentage of seniors who live alone. The percentage of seniors living alone increased statewide and nationally with a higher percentage in PA (13%) versus the US (11%). Within the Central Region, all counties except Snyder have a higher percentage of seniors living alone in comparison to the state and nation. Union County experienced the greatest increase (nearly 5 percentage points) in seniors living alone from 2010-2014 to 2014-2018.

Aging Population Data

2017 Chronic Conditions among Medicare Beneficiaries 65 Years or Over

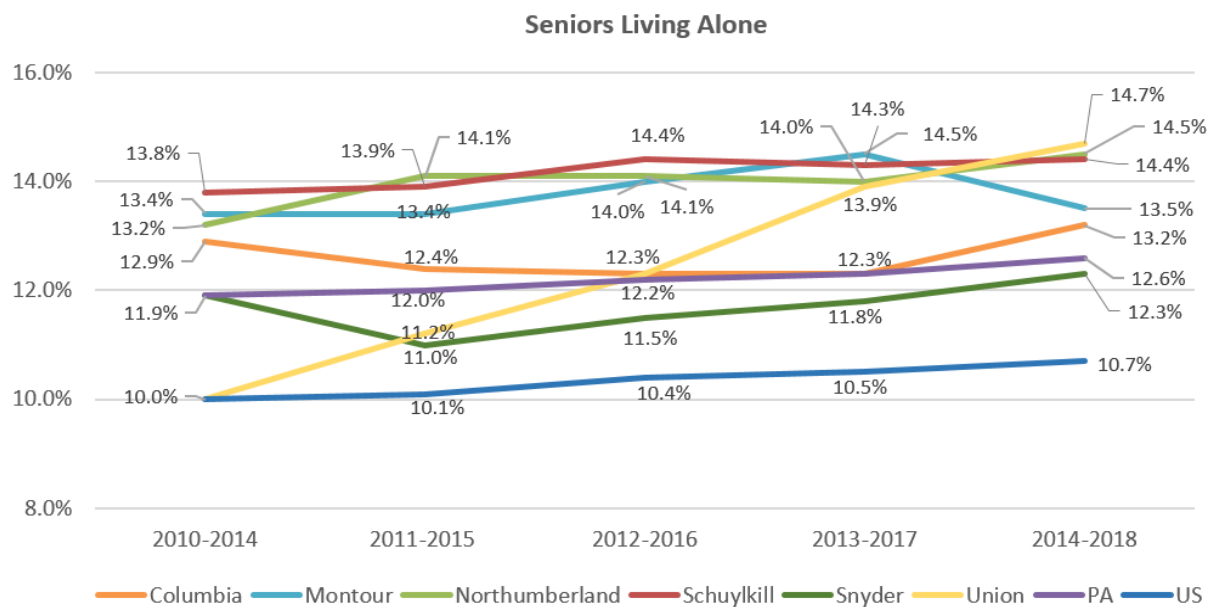
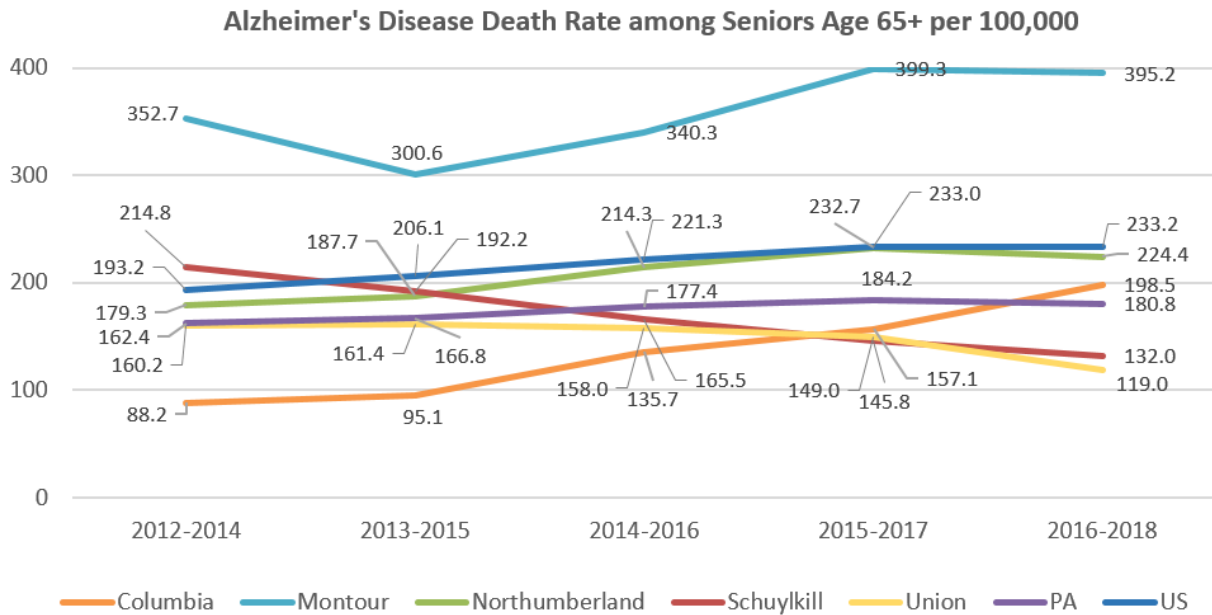
	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA	US
Multiple Chronic Conditions (Comorbidities)								
2 to 3 Conditions	31.8% ▲	31.4% ▲	30.3% ▼	32.1%	32.9%	33.5% ▼	31.1%	29.6%
2015 (2018 CHNA comparison)	30.5%	30.4%	31.3%	32.6%	33.7%	35.9%	31.1%	30.0%
4 to 5 Conditions	22.9%	21.6%	25.5%	24.2%	26.8%	23.1%	22.9%	21.8%
2015 (2018 CHNA comparison)	22.0%	21.5%	25.1%	24.8%	26.0%	22.5%	22.9%	21.6%
6 or More conditions	17.2%	17.4%	22.2%	19.8% ▲	19.8% ▲	14.8%	18.2%	17.4%
2015 (2018 CHNA comparison)	16.3%	16.9%	21.7%	18.7%	18.0%	15.0%	17.6%	16.2%
Per Capita Standardized ¹ Spending								
2 to 3 Conditions	\$4,736	\$5,339	\$4,419	\$4,403	\$3,932	\$5,323	\$5,141	\$5,392
4 to 5 Conditions	\$9,504	\$9,857	\$8,689	\$9,189	\$7,416	\$8,449	\$10,117	\$10,475
6 or More conditions	\$25,656	\$26,999	\$25,483	\$29,110	\$24,716	\$26,952	\$29,184	\$29,004
Chronic Condition Prevalence by Type								
Alzheimer's Disease	10.1%	NA	12.2%	12.4%	10.6%	NA	12.2%	12.1%
Arthritis	34.2%	33.1%	36.5%	38.6%	36.5%	34.9%	36.1%	34.2%
Asthma	5.2%	6.4%	6.0%	3.6%	5.4%	4.8%	4.9%	4.6%
Cancer	9.2%	10.0%	9.6%	9.1%	8.6%	9.8%	10.1%	9.2%
COPD	11.4%	11.9%	14.7%	13.3%	12.4%	9.8%	11.2%	11.6%
Depression	17.4%	18.1%	20.1%	14.9%	20.3%	17.0%	16.1%	15.4%
Diabetes	25.8%	25.6%	30.3%	29.0%	29.5%	24.0%	26.6%	27.4%
Heart Failure	13.7%	14.8%	18.5%	17.5%	16.1%	13.0%	14.4%	14.5%
High Cholesterol	47.5%	43.1%	55.2%	51.6%	62.1%	50.8%	47.6%	43.0%
Hypertension	60.6%	56.4%	66.4%	66.8%	66.7%	58.8%	62.3%	59.9%
Ischemic Heart Disease	30.3%	28.0%	31.0%	32.3%	28.2%	26.3%	29.9%	28.8%
Stroke	3.9%	NA	4.4%	5.4%	3.9%	4.6%	4.6%	4.0%

Source: Centers for Medicare & Medicaid Services, 2015 & 2017

*Green highlighting indicates a lower burden of disease than the state and nation; red highlighting indicates a higher burden. Trending denoted as increasing (▲) or decreasing (▼) by ≥1 percentage point since 2015.

¹ Standardized spending takes into account payment factors that are unrelated to the care provided (e.g. geographic variation in Medicare payment amounts)

Aging Population Data



Key Informant Survey Findings

Background

A Key Informant Survey was conducted with community representatives of the Central Region to solicit information about health needs among residents. A total of 77 individuals responded to the survey, including health and social service providers; community and public health experts; civic, religious, and social leaders; policy makers; and others representing diverse populations including minority, low-income, and underserved residents. A list of the represented community organizations and the key informants' respective titles is included in Appendix C. Key informant names are withheld for confidentiality.

These key informants were asked a series of questions about their perceptions of community health including health drivers, barriers to care, community infrastructure, and needed services within the community. Following is a summary of findings from their responses.

Summary of Findings

- > Key informants identified the Central Region's top community strength, as access to healthcare services (45.5%). Good schools and safe neighborhoods were also listed as community strengths by approximately one-third (31%-34%) of informants.
- > Behavioral health was seen as the top health concern for the region. Nearly 60% of informants selected mental health conditions and 44% of informants selected substance use disorder (SUD) among the top three health concerns across the region. About 40% of key informants named drug and alcohol use as a contributing factor to health concerns.
- > Overweight/obesity and aging-related problems were among other top issues with diet and physical activity among the top contributing factors to overarching health concerns.
- > About 30% of key informants recognized social determinants of health (SDoH), including poverty (32.5%), ability to afford healthcare (27%), and lack of transportation (27%) as key contributing factors to health.
- > Identified health concerns were reflected by the top missing community resources. Nearly 68% of key informants selected mental health services as a missing resource and 40% selected SUD services. Fifty-six percent (56%) of informants also saw transportation as a missing resource.
- > Overall quality of life in the Central Region was largely seen as stagnant (55%) or declining (27%) over the past 3-5 years. SDoH are key indicators of quality of life. Informants perceived the greatest improvements in "neighborhood and built environment" and the greatest decline in "social and community context" and "economic stability." These findings may be indicative of the economic impact of COVID-19 and the acknowledgement of historical and systemic racial inequities. Verbatim comments by informants noted regional economic decline and a growing need for affordable housing and healthcare options.

- > Nearly 80% of informants “agreed” or “strongly agreed” that health and social service providers welcome partnerships with area hospitals, and 70% “agreed” or “strongly agreed” that they regularly partner with hospitals on health improvement initiatives. Some informants commented that more work is needed to ensure effective collaboration to address health needs and to engage residents when developing health initiatives.
- > Informants differed on what they perceived as the top barriers to health and social service partnerships. Responses were divided by one-third across these issues: lack of shared data or measurement tools; inconsistent service areas or geographic boundaries; and ability to get local leaders to work together. Verbatim comments by informants indicated a need for better communication among partners regarding available resources and referral procedures, and a formal structure to initiate and sustain collective action.
- > Key informants were “somewhat” to “moderately” worried about the long-term impact of COVID-19 on communities and residents. They were most concerned about the impact on the mental and emotional health of residents, the well-being of the elderly, and community financial health.
- > When asked to share how their organization is effectively engaging community residents during COVID-19, many informants spoke to the increased use of technology and social media to provide virtual learning and service environments, community education and awareness campaigns, mobile and community-based services, and cross-sector partnerships to better understand COVID-related needs and disseminate available information and resources.

Survey Participants

Key informants represented diverse organizations and populations across the Central Region. The table below shows the breakdown of survey participants by county, with the highest number of responses from Northumberland and Union counties, in line with a higher number of community based organizations in these counties. Approximately 40% of key informants indicated that they served all populations. The most commonly served special population groups were low-income/poor, seniors/elderly, and children/youth.

Central Region Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Northumberland County	63.6%	49
Union County	61.0%	47
Snyder County	52.0%	40
Montour County	48.1%	37
Columbia County	46.8%	36
Schuylkill County	33.8%	26

*Key informants were able to select multiple counties. Percentages may not add up to 100%.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Low-Income/Poor	44.2%	34
Seniors/Elderly	41.6%	32
Children/Youth	40.3%	31
Not Applicable (serve all populations)	40.3%	31
Families	37.7%	29
Emotionally or Physically Disabled	20.8%	16
Homeless	19.5%	15
Women	19.5%	15
Uninsured/Underinsured	19.5%	15
Men	15.6%	12
Hispanic/Latinx	14.3%	11
Black/African American	13.0%	10
LGBTQ+	13.0%	10
Veteran	13.0%	10
Other**	10.4%	8
American Indian/Alaska Native	6.5%	5
Asian/Pacific Islander	6.5%	5
Immigrant/Refugee	6.5%	5

*Key informants were able to select multiple populations. Percentages do not add up to 100%.

**Other populations included: Parents/Guardians of children; seniors who are socially, economically, and nutritionally in need; adults and children with development exceptionalities; plain community; college students; individuals with substance use disorder

Community Health and Well-Being

An asset-based approach to health improvement planning acknowledges and makes visible the strengths, resources, and potential in communities. This approach helps community planners to identify the existing factors that support resident health and well-being to better mobilize stakeholders.

Community Strengths

Choosing from a wide-ranging list of environmental, health, and social resources, key informants were asked to select the top three strengths in the communities they serve. An option to “write in” any resource not included on the list was provided. The top responses are depicted in the table below. The table is rank ordered by the percentage of respondents that selected the resource as a top three community strength.

Access to healthcare services was identified as the top strength in the Central Region by nearly half (45.5%) of key informants. Good schools and safe neighborhoods were also selected as top community strengths by approximately one-third of informants. Available social services (30%) and community connectedness (19.5%) rounded out the top five selections by informants.

Top Community Strengths

Ranking	Community Strength	Informants Selecting as a Top 3 Community Strength	
		Percent*	Count
1	Access to healthcare services	45.5%	35
2	Good schools	33.8%	26
3	Safe neighborhoods	31.2%	24
4	Available social services	29.9%	23
5	Community connectedness	19.5%	15
6	Resources for seniors	16.9%	13
7	Strong family life	14.3%	11
8	Access to healthy foods	13.0%	10
8	Affordable housing	13.0%	10
8	Recreation resources	13.0%	10

*Key informants were able to select up to three community strengths. Percentages do not add up to 100%.

Health Concerns

Key informants were asked to similarly select what they perceived as the top three health concerns and contributing factors impacting the population(s) they serve. An option to “write in” any health issue or contributing factor not included on the lists was provided. The top responses are depicted in the tables below. The tables are rank ordered by the percentage of respondents that selected the issue or contributing factor as a top three concern.

Nearly 60% of informants chose mental health conditions among the top three community health concerns and approximately 44% chose substance use disorder (SUD). This agreement demonstrates a consistent perspective that behavioral health is a key community issue. Overweight/Obesity was ranked the third health concern with 43% of informants choosing it as a key issue.

The Central Region has a significant percentage of older adults with approximately 20%-25% of residents age 65 or over. Key informants’ responses indicated aging-related problems as the fourth ranked health concern for the region. While chronic diseases affect residents of all ages, seniors typically have a higher prevalence of disease. Chronic conditions, including diabetes, heart disease, and cancer, were among the top 10 health concerns identified by key informants.

Top Health Concerns Affecting Residents

Ranking	Health Concern	Informants Selecting as a Top 3 Health Concern	
		Percent*	Count
1	Mental health conditions	58.4%	45
2	Substance use disorder	44.2%	34
3	Overweight/Obesity	42.9%	33
4	Aging-related problems	32.5%	25
5	Diabetes	19.5%	15
6	Heart disease and stroke	15.6%	12
7	Dental problems	14.3%	11
8	Cancers	11.7%	9
9	Child abuse/neglect	9.1%	7
10	Racial/Ethnic disparities	7.8%	6

*Key informants were able to select up to three health concerns. Percentages do not add up to 100%.

A similar percentage of key informants (40%-43%) identified drug/alcohol use and health habits (e.g. diet, physical activity) as top contributing factors to health concerns. This finding is consistent with the identification of behavioral health and SUD as the top identified health issues, reinforcing the relationship between physical and behavioral health outcomes. Social determinants of health, including poverty, ability to afford healthcare, and lack of transportation, were the next most commonly identified contributors to health concerns in the region.

Top Contributing Factors to Community Health Concerns

Ranking	Contributing Factor	Informants Selecting as a Top 3 Contributor	
		Percent*	Count
1	Drug/Alcohol use	42.9%	33
2	Health habits (diet, physical activity)	40.3%	31
3	Poverty	32.5%	25
4	Ability to afford healthcare	27.3%	21
4	Lack of transportation	27.3%	21
6	Stress (work, family, school, etc.)	18.2%	14
7	Lack of social support (family, friends, social network)	16.9%	13
8	Health literacy (ability to understand health information)	14.3%	11
9	Availability of healthcare providers	13.0%	10
10	Housing quality/stability	11.7%	9

*Key informants were able to select up to three contributing factors. Percentages do not add up to 100%.

Missing Resources

Key informants were asked what resources are missing in the community that would help residents optimize their health. Respondents could choose as many options as they saw as needed. An option to “write in” any resource not included on the list was provided.

Consistent with the finding of behavioral health as the top identified community health concern for the region, mental health services were the most commonly identified missing resource by 67.5% of informants. Substance use disorder services were chosen by 40% of informants, making it the third ranked missing resource. Transportation options, identified as a top contributor to health concerns, was prioritized by informants as a missing resource. Approximately 56% of key informants identified transportation options as missing resources, second only to mental health services.

Top Missing Resources within the Community to Optimize Health

Ranking	Resource	Percent of Informants	Number of Informants
1	Mental health services	67.5%	52
2	Transportation options	55.8%	43
3	Substance use disorder services	40.3%	31
4	Health and wellness education and programs	29.9%	23
5	Affordable housing	27.3%	21
5	Dental care	27.3%	21
7	Adult education (GED, training, work force development)	24.7%	19
7	Community support groups	24.7%	19
9	Child care providers	22.1%	17
10	Social services assistance (housing, electric, food, clothing)	19.5%	15

Social Determinants of Health

The US Department of Health and Human Services' Healthy People initiative defines social determinants of health (SDoH) as, "The conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks."

Informants were asked to rate select SDoH dimensions, as well as overall quality of life, based on perceived trends in the community over the past 3-5 years. Statements were rated on a scale of (1) "declined" to (3) "improved." Key informants' responses are outlined in the table below; SDoH are rank ordered by mean score.

According to survey responses, overall quality of life in the Central Region has been largely consistent (55%) or declining (27%) over the past 3-5 years. Informants perceived the greatest amount of progress in addressing the "neighborhood and built environment." Nearly one-quarter of respondents indicated that this dimension improved in recent years. Other SDoH dimensions were largely seen as stagnant or declining. "Social and community context" and "economic stability" were seen as declining by 45.5% and 52% of informants, respectively. This finding may be indicative of the economic impact of COVID-19 and recent emphasis on historical and systemic racial inequities. Thirty percent (30%) of key informants saw housing opportunities as declining.

Quality of Life and Social Determinants of Health: Perceived Trends

	Improved (3)	Stayed the Same (2)	Declined (1)	Don't Know/NA	Mean Score
Quality of Life , defined as the general well-being of individuals and communities	10.4%	54.6%	27.3%	7.8%	1.68
Social Determinants of Health					
Neighborhood and built environment (access to healthy foods, sidewalks, open spaces, transportation)	22.1%	58.4%	14.3%	5.2%	1.97
Health and healthcare (access, cost, availability, quality)	13.0%	67.5%	15.6%	3.9%	1.90
Education (high school graduation, enrollment in higher education, language/literacy, early childhood education and development)	9.1%	64.9%	16.9%	9.1%	1.74
Housing opportunity (quality, cost, availability)	4.0%	57.9%	30.3%	7.9%	1.58
Social and community context (social cohesion, civic participation, perceptions of discrimination and equity, incarceration/institutionalization)	10.4%	32.5%	45.5%	11.7%	1.42
Economic stability (poverty, food security, employment, housing stability)	6.5%	33.8%	52.0%	7.8%	1.39

Informants were asked to share open-ended feedback regarding community health and well-being for the populations they serve. Many informants spoke to the impact of COVID-19 on the community, as well as regional economic decline, growing behavioral health needs, and lack of affordable housing and healthcare options. Select verbatim comments by key informants are included below.

- > *“COVID has seriously affected social interaction, exercise, healthy eating.”*
- > *“The COVID-19 pandemic has exposed shortfalls in public health, hospitals/health systems, payment systems/insurance.”*
- > *“Healthcare access and overall economic conditions did improve with the ACA, but have dramatically declined recently due to the pandemic.”*
- > *“Housing in the Danville area is high with limited availability.”*
- > *“Loss of factory work, no high paying jobs in area any longer, harder to make ends meet for most of Northumberland Co., no transportation available for people to get emergency care, increase of drug and alcohol use.”*
- > *“Need more intergenerational opportunities.”*

- > *“Our area is considered a rural area which consists of a large elderly population. The elderly population are hesitant to seek help for themselves and refrain from asking for assistance when they have an unmet need for daily living.”*
- > *“The area has seen a dramatic decline in the past 12 years since I moved here. People have continuously left the area to find work, go to college, and the elderly, which are the bedrock of this community, are passing away or moving into elder care facilities. The housing in the area is controlled by landlords who do the minimum upkeep to the properties. Many properties are unsafe. If you do not own a vehicle, you are relying on limited choices for transportation. This area is not appropriate for low-income families who could be better served in Urban/Metro areas where more services are available including public transportation.”*
- > *“The community I reside in has an influx of inner city folks who have brought their way of life with them, including heavy drug culture, that has been accommodated by lack of policy enforcement for maintaining quality housing (lack of codes follow through) leading to crime, racial tension and security loss for the community. Seniors are often at risk as they have limited supports and are often taken advantage of by these individuals. The whole health care and social supports systems are overwhelmed by lack of funding and staff availability to provide service. Health care workers are burning out and experiencing health issues themselves.”*
- > *“The opioid epidemic has stunted efforts being made to improve health and wellness in our region.”*
- > *“The price of healthcare keeps rising faster than inflation, and the toxic political culture nationally has poisoned the local mood, too. This latter comes directly from the top, i.e. the president. Likewise, the utterly awful response to COVID-19, nationally, has filtered down to a stupid, piecemeal approach statewide and locally -- high school sports most important, again? -- and this has left many of our businesses and all of us as citizens floundering.”*
- > *“There are opportunities available for people, there are plenty of "programs" but engaging those people caught in poverty due to mental health or substance abuse issues continues to be an issue. Meeting people where they are and providing early intervention for kids at risk is an important component to overall community health.”*
- > *“We have strong employers locally that provide a stable economic backbone for our borough, but like everyone else coronavirus has strained local resources. We have stronger local health-related amenities and infrastructure than some communities, but I also believe that poverty and struggle are somewhat hidden, because social services are all provided by larger, regional umbrella organizations rather than through our local municipality.”*

Community Engagement and Partnerships

Key informants were asked to rate their agreement to statements pertaining to community partnerships and engagement of diverse stakeholders and residents. Statements were rated on a scale of (1) “strongly disagree” to (5) “strongly agree.” Key informants’ responses are outlined in the table below in rank order by mean score.

Nearly 80% of informants “agreed” or “strongly agreed” that health and social service providers welcome partnership opportunities with area hospitals, and 70% “agreed” or “strongly agreed” that hospitals welcome partnership opportunities with health and social service providers. Nearly 70% of informants “agreed” or “strongly agreed” that they regularly partner with hospital providers on health improvement initiatives and that they know who to contact at the hospital to discuss opportunities. These factors received the highest mean scores by key informants.

Approximately 65% of key informants “agreed” or “strongly agreed” that health and social service providers effectively collaborate to address health needs, while 20% of informants “disagreed” that providers effectively collaborate. Similarly, 18% of informants “disagreed” that partners garner resident feedback or engage residents when developing health improvement initiatives. These factors received the lowest mean scores by key informants.

Community Engagement and Partnership Indicators in Descending Order by Mean Score

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly Agree (5)	Mean Score
Health and social service providers in the community I serve welcome partnership opportunities with surrounding hospital(s)/health system(s).	0.0%	3.9%	19.5%	57.1%	19.5%	3.92
The hospital(s)/health system(s) located in the community I serve welcome partnership opportunities with surrounding health and social service providers.	2.6%	10.4%	16.9%	48.1%	22.1%	3.77
My organization regularly partners with the local hospital(s)/health system(s) on health improvement initiatives.	5.2%	11.7%	14.3%	44.2%	24.7%	3.71
If I want to collaborate with the hospital(s)/health system(s) located in the community I serve, I know who to contact.	3.9%	14.3%	14.3%	41.6%	26.0%	3.71
Health and social service partners in the community I serve effectively collaborate to address health needs.	0.0%	19.7%	15.8%	57.9%	6.6%	3.51
Health and social service partners in the community I serve garner resident feedback or engage residents when developing health improvement initiatives.	0.0%	18.4%	40.8%	39.5%	1.3%	3.24

Key informants were asked what they perceived as barriers to health and social service partnerships within their communities. Respondents could choose as many barriers as applied. The following were the top identified barriers, selected by 30%-34% of informants: Lack of shared data or measurement tools; inconsistent service areas or geographic boundaries; and ability to get local leaders to work together. Lack of operating support was the fourth ranked barrier (27%), followed by lack of consistent or timely communication (25%).

Top Perceived Barriers to Community Collective Impact Partnerships

Ranking	Barrier	Percent of Informants	Number of Informants
1	Lack of shared data or measurement tools	33.8%	26
2	Inconsistent service areas or geographic boundaries	31.2%	24
3	Ability to get local leaders to work together (competition, varying agendas)	29.9%	23
4	Lack of operating support	27.3%	21
5	Lack of consistent or timely communication	24.7%	19
6	Ability to demonstrate outcomes	23.4%	18
6	Lack of agreement on partnership structure or roles	23.4%	18
8	Don't know/Not sure	18.2%	14
9	Lack of agreement on the functions or management of the partnership	16.9%	13
10	Lack of backbone structure or leadership	11.7%	9
10	Other (please specify)	11.7%	9

Informants provided the following comments related to community partnerships and engagement:

- > *"I feel we have great partnerships. It's always good to have more!"*
- > *"I have been working with and trying to create partnerships and cooperative efforts with health care providers, social service organizations, and educational institutions for years. What I have witnessed is too many meetings and discussions that either allow a concept to die before it's born or no one to take ownership and continue the program after it's inception or trial run. There is no one willing to be held accountable for long-term commitment for change."*
- > *"In working with social service agencies and coalitions, I find the agencies are receptive to working together and overcoming barriers. The only reason I did not give that question strongly agree is the agency turnover due to the low pay in my community and higher pay in surrounding communities. It is hard to keep partnerships strong when staff is constantly changing. I have partnered with the hospitals in the past but I find they are controlling of the partnership and they are not flexible to meet my grant needs or they provide space only no support. A few hospitals in the area offer directly competitive programming and have no willingness to partner on shared goals. It is hard to contact doctors and hospitals to get support for advertising outside programs."*

- > *"I think with better communication among agencies, access to services would increase. I see many agencies operating in "silos," not aware of what others are doing."*
- > *1. "Many times, hospitals or nursing homes discharge a person who lives alone, with a discharge summary that notes, "Referred to Area Agency on Aging." Often, they do not make this referral BEFORE discharge, they just send the person home. I have called numerous discharge planners to explain that Area Agency has waiting lists, does not always have funding, and in any case cannot provide 24/7 home care at all, let alone immediately. I have been told that since they made the referral, it is now our responsibility. If they would only call BEFORE the discharge and discuss what AAA can or can't provide for this particular patient, unsafe discharges would be avoided."*
- 2. "Doctors (PCP offices) often call Area Agency on Aging about things that they (the PCP) should be doing. Only a physician, not Area Agency on Aging, can revoke a person's driver's license or declare a person mentally incompetent. Why don't they know this? I have also encountered PCPs who have no idea of the procedure involved to admit a patient to a nursing home. I am happy to explain, since this involves both the PCP and AAA, but again, shouldn't doctors and nursing homes be aware of this?"*
- > *"Partnership for true community based quality improvement issues is vital. Often that is challenged by the ability of partners and providers to have the structure and resources necessary to do so effectively. Within our scope of focusing on those 65+ and particularly those with cognitive concerns, we know there are well-documented challenges in detection and diagnosis, particularly in primary care and community settings. Geisinger's Memory Clinic staff have been incredibly engaged leaders and partners but overall sites and departments throughout the system are not and quite often any willingness or responsiveness to further discussions is met with silence or significant institutional barriers that make true partnerships difficult to advance."*
- > *"People may not have a clear understanding of the services that are available. I'm not sure they know where to start. Every organization has its own program and even if there is collaboration, do people really know where to go to get information or services they need?"*
- > *"There are frequent conversations that we, as social service agencies, have with healthcare leaders. But it very rarely leads to productive partnerships. We find that healthcare leaders are very inwardly focused on their own organizations. They are focused on hiring "their own people" instead of leveraging the strengths of and supporting social service agencies."*
- > *"We have multiple layers of jurisdiction and service. Our local jurisdictions are very politically divided. People have different facts. This has been a huge problem with corona virus pandemic."*

COVID-19 Response and Recovery

COVID-19, named as a novel coronavirus discovered in Wuhan China in December 2019, caused a worldwide pandemic, resulting in nearly one million deaths worldwide (as of the printing of this report) and global economic impact. New insights are derived daily during this dynamic situation and the CHNA partners will continue to learn from data collected throughout the pandemic.

Key informants were asked to rate the extent to which their organization is “worried” about the long-term impact of the COVID-19 health crisis on communities and residents. Ratings were based on a scale of (1) “not at all worried” to (5) “very worried.” Key informants’ responses are outlined in the table below in rank order by mean score.

Mean score findings indicate that key informants were generally “moderately” worried about the long-term impact of COVID-19 on communities and residents. All factors received rounded mean scores of 3.7 or higher, with the exception of “trust in public health institutions and information” rated as a score of 3.2. Key informants were most concerned about the impact of COVID-19 on the mental and emotional health of residents (86.5%), the well-being of the elderly (81%), and community financial health (73%). More than half of informants indicated they were “very worried” about these three items.

Perceived Level of Worry for the Long-Term Impact of COVID-19 on Communities and Populations in Descending Order by Mean Score

	Not At All Worried (1)	Slightly Worried (2)	Somewhat Worried (3)	Moderately Worried (4)	Very Worried (5)	Mean Score
Mental and emotional health of residents	0.0%	4.1%	9.5%	28.4%	58.1%	4.41
Well-being of the elderly	0.0%	1.4%	17.6%	27.0%	54.1%	4.34
Community financial health	2.7%	2.7%	21.9%	20.6%	52.1%	4.16
Well-being of healthcare workers	2.7%	8.1%	14.9%	32.4%	41.9%	4.03
Well-being of racial and ethnic minority groups	6.9%	6.9%	15.1%	41.1%	30.1%	3.81
Well-being of young people	4.1%	12.2%	21.6%	35.1%	27.0%	3.69
Trust in public health institutions and information	18.9%	14.9%	18.9%	20.3%	27.0%	3.22

COVID-19 has created new challenges for engaging residents in their health and well-being, and has highlighted longstanding inequities that perpetuate disparities among people of color and within vulnerable communities. Health and social service providers have the opportunity to apply lessons learned from COVID-19 to future efforts to better engage residents and promote sustained changes for community health.

Key informants were asked to share how their organization is effectively engaging community residents during COVID-19. Many informants spoke to the increased use of technology and social media to provide virtual learning and service environments, community education and awareness campaigns, mobile and community-based services, and cross-sector partnerships to better understand COVID-related needs and disseminate available information and resources. Select verbatim comments by key informants are included below.

- > *“Agency staff continue to contact community residents weekly to assess their needs for agency services.”*
- > *“All meetings are open via zoom to the public. Issued declaration of health emergency and regularly release reports and status.”*
- > *“All services of the MACC (Middlecreek Area Community Center) are opened so that we can support the physical fitness, food insecurity, childcare, medical outreach, and family activity needs of our community in a manner consistent with the orders and guidance from the state.”*
- > *“Distribution of food and case management for clients by appointments or phone calls.”*
- > *“Education on COVID, offering face-to-face visits and video/telephone visits for those at risk patients.”*
- > *“Free Mobile Food Pantry. Online programs.”*
- > *“Head Start will offer in-classroom and virtual services to clients. Social services staff will be reaching out to families on a weekly basis to assess the family's needs.”*
- > *“Launched several initiatives aimed at helping businesses, schools, and community organizations reopen, as well as served as the trusted healthcare partner to disseminate info on COVID.”*
- > *“Not as well as I'd like. We have done press releases, a public health signage campaign, and have organized a Spotlight Orange press conference. It's still hard.”*
- > *“Partnering with local nursing homes for support. Masking education provided to community.”*
- > *“Providing access to COVID testing through our internal hotline. Providing community education. Offering community-welcomed flu shots/health screenings.”*
- > *“Providing programming and services to help meet the needs of patients, members, and communities to help them successfully navigate through this challenging time. Engaging with CBOs and forming partnerships and formalized referral options in conjunction with newly introduced tech support (Neighborly). Doing "check in" appointments and making sure we are embedding questions during appointments to better understand if any concerns or issues.”*
- > *“Public awareness, open access meetings for the community, signage in medical practices and facilities, public access to COVID-19 hotline. Health and wellness coaches engaging community residents. Mobile bus bringing services to the community (lab testing, flu vaccine, diabetes screening).”*

- > *"Subsidizing efforts to provide safety and hygiene information in multiple ways, both broadly (podcast, news releases) and specifically (signs in stores, etc.)."*
- > *"We are back in operation at 75 percent capacity. We are using virtual methods to assist with volunteering e.g., college student reading book to children, virtual play and learn sessions."*
- > *"We are doing everything we can at the Miller Center to provide a clean and safe environment for members to exercise while COVID-19 is still very present in our communities. Exercise is an extremely important part of well-being and it is important for local gyms, fitness, and recreation centers to stay open to provide safe opportunities for people to get out of their homes and exercise."*
- > *"We are gradually restarting programming to support health and wellness, however, many people in our community do not feel comfortable participating yet."*
- > *"We are leading the coordination of COVID response for social service agencies. We have leveraged funding and provided that to support agency grants as well as direct support to the community."*
- > *"We are not effectively engaging the community. I personally work with many who have lack of internet and phone services to complete courses online or via phone communication. It is very hard to market the programs and advertise when so many businesses and partner agencies are closed or are limiting their own in-person, telephone, or online services. Our offices are only accessible to the public by email, mail, or phone as all agents are working remotely and online with very limited face-to-face contact. The website as a whole is a useful tool for COVID-19 research and science-based information, but if they are unable to access the internet or do not know of our website's existence, they will not benefit."*
- > *"We are working on developing programs that can provide hope for a brighter future and prosperity for our region as a whole. Trying to get the right people at the table to seriously address the mental and psychological treatment that is, and will be, needed long term. Trying to create alternatives for employers to hire and retain employees that either have skills and/or get the necessary skills while employed."*
- > *"We have created a podcast to facilitate communication and compile and share information about the pandemic, highlighting the need to follow trustworthy sources and recognize/fight disinformation and misinformation. We struggle with a lack of leadership outside of the service agencies on this topic locally."*
- > *"We have funds available to provide financial assistance with rent, car repairs, utility shut off notices, and other unexpected financial obligations that arose during COVID (e.g., a death in family)."*
- > *"We have responded with financial support, as well as participated in task forces to better understand the needs of the community and the resources that are available. These efforts have helped to highlight what needs are being met and where focus is still needed or will be needed to fill gaps in services and resources."*
- > *"We worked with healthcare and manufacturers to make and acquire PPE for high-risk individuals and providers."*

Additionally, informants were asked to share how hospitals and community partners can effectively collaborate to address health and social disparities highlighted by COVID-19. Informants provided the following suggestions:

- > *“As a leader of a facility that is owned by two separate hospital systems, we find regular meetings to be an extremely effective way to collaborate. In these meetings we share with the healthcare teams what is going on in the Center and they share with us their challenges and opportunities to collaborate. For example, blood donations are in high demand right now. Due to restrictions in hospitals on visitation they cannot host blood drives. However, in a recreation center we are able to host such an event and help meet this demand.”*
- > *“Available education to community groups, public access to COVID-19 hotline, availability of testing centers on public transportation routes.”*
- > *“Braided funding is a must. We need to get creative about how we fund these issues. And we need to do it together. Healthcare leaders need to respect and be open to the fact that social service agencies can provide services and programs at a fraction of the cost that they can. And often are more effectively.”*
- > *“Geisinger launched Neighborly is an easy-to-use social care platform that can help connect our neighbors to free and reduced-cost programs and services in the community. Since March 2020, over 600 people from various community organizations participated in training regarding the platform.”*
- > *“Hospital social workers understand more about the services offered by the community partners and as soon as possible notify the social service partner of what issues the patient about to be discharged has and to make sure there is effective and ready answers to meet those needs. Last minute needs are often times very difficult to fill within a few hours' time span. This is particularly true of those needing housing. Geisinger Foundation has been extremely helpful for AGAPE in its financial donations to help with housing, food, and transportation needs of our clients.”*
- > *“I think communication is critical to effectively collaborate. It is important for both groups to listen to one another and for conversations to be had with those with the authority to act. Response efforts cannot get lost in committee discussions or be only feel-good in nature. Our communities are going to need a united front now and going forward to address the health and social disparities highlighted by COVID-19.”*
- > *“It is difficult for parents to access mental health services for both their children and themselves. Shorter response time for in-take.”*
- > *“It would be beneficial to attend schools and provide information at student levels. It would be important to get involved with churches, workout groups, or social committees to share information regarding CDC guidelines, misconceptions, and importance of social practices to maintain health and wellness of all community members.”*

- > *“Let's start by being honest. The health and social disparities were not highlighted by covid-19, as much as they were made worse and thus more apparent due to the orders put in place in response to covid-19. For example, in the case of COVID patients being placed in nursing homes, where the population was most vulnerable, there was an egregious disparity of elitism in that the health secretary who made that decision took her own mother out of the senior home just prior to enacting the decision. Hospitals and community partners can address such disparity by effectively collaborating to holding these officials in government accountable.”*
- > *“Our community center strives to meet the needs of the community as best we can. I would recommend starting collaboration by understanding what hospital community services and benefits might best be delivered via a community center setting. The Evangelical Hospital mobile unit comes to our facility on a regular basis. Red Cross comes for blood drives and provides some educational classes like CPR and first aid. There may be others including on-site doctor visits or physical therapy or diet programs where the community center provides the facility and perhaps some staffing but the hospital provides the programs and expertise.”*
- > *“Provide local asymptomatic testing options to get community members back to work in a timely fashion, especially given the public transportation dependency of our community.”*
- > *“Put pressure/convince local elected officials of the need to amplify public health messaging.”*
- > *“Sharing information. Using social media. Conducting and attending coalition meetings and sharing resources. Open communication and partnerships with area social service organizations. Supporting local agencies by providing guest speakers to events (live or virtual) and creating opportunities for the community to learn more about the hospital and agencies that support the health and welfare of the community through health fairs, open houses, and community events when face to face communication is safe again.”*
- > *“There is so much conflicting information out about COVID-19 that it would be nice to have hospitals and community partners on the same page. Keeping everyone informed about the rate of spread would also help. Again, numbers continuously differ so that it is difficult to know who to believe or trust.”*

Evaluation of Impact from Prior CHNA Implementation Plan

Background

Evangelical Community Hospital is one of the region's leading healthcare providers. In fiscal years (FY) 2019 and 2020, the Hospital:

- Received 455,663 outpatient visits
- Received 10,875 inpatients
- Provided 4,031 patient observation stays
- Delivered 1,504 babies
- Received more than 58,545 emergency department visits

At Evangelical Community Hospital, a key word is right in the name—COMMUNITY. Improving the health of the communities it serves is a commitment rooted deeply in the culture at Evangelical. In FY2019 and FY2020, the Hospital invested more than \$92 million in the health of the community. These funds supported the care of individuals who could not afford to pay for some or all of the costs associated with their treatment, addressed government funding shortfalls, provided for donations to community outreach organizations for them to fulfill their own visions of community support, and delivered free of charge community health education programs to promote healthier living.

Knowing where to focus Evangelical's resources starts with a CHNA, an opportunity in which Evangelical engages the community to help identify and prioritize the most pressing needs, assets, and opportunities. Evangelical completed its most recent CHNA in 2018 and developed a supporting Community Health Implementation Plan (CHIP) outlining targeted action items to address the identified CHNA health priorities. The strategies implemented to address the health priorities reflect Evangelical's mission and commitment to building a healthy community.

The findings from the 2018 CHNA identified the following priorities:

- > Access to Care
- > Behavioral Healthcare
- > Chronic Disease Prevention and Management

2018-2020 Evaluation of Impact

Evangelical Community Hospital developed and implemented a plan to address community health needs that leverages resources across the hospital and the community. The following section highlights the status and outcomes from the implemented strategies.

Access to Care

Action Item 1: Provide free or reduced-fee health screenings and preventive programs, such as skin cancer screenings, blood sugar testing, blood pressure checks, comprehensive blood screenings, and more.

- > Evangelical Community Hospital offered the following free or reduced-fee screenings at various times and locations throughout the community in FY2019-FY2020:

Community Health and Wellness	FY2019	FY2020*
Comprehensive blood screenings	1,161	790
Community health screenings (Men's, Women's, Hunters, Heart)	235	204
Skin screenings	61	89
Blood pressure/blood sugar screenings	714	580
Heel scan/bone density clinics	169	48

*FY2020 programming was significantly reduced due to the COVID-19 pandemic.

Action Item 2: Expand the free food box program, to include the use of Hospital to Home, to assist with providing food boxes for patients that identify as food insecure.

- > During FY2019-FY2020, Evangelical Community Hospital distributed 182 food boxes to patients identified as food insecure. The program was provided in partnership with case management and the Hospital to Home program.

Action Item 3: Work with the Nurse-Family Partnership Program for at-risk, young, expectant women to improve pregnancy outcomes, child health and development, and economic self-sufficiency for the family.

- > Evangelical made 36 referrals to the Nurse Family Partnership. This collaborative program involves a nurse making home visits over 30 months from before birth until the baby is age two. More than 30 years of randomized, controlled trials show that families who participate in the Nurse-family Partnership model fare better than those not in the program.

Action Item 4: Collaborate with external community organizations to increase awareness and access to healthy lifestyle resources.

- > In FY2020, Evangelical Community Hospital, Geisinger, the Miller Center for Recreation and Wellness, and the Greater Susquehanna Valley YMCA came together to make a positive, lasting impact on the health and wellness of the region with the establishment of the Lewisburg YMCA at the Miller Center. The Lewisburg YMCA at the Miller Center is a community-based resource powered by Evangelical and Geisinger, offering comprehensive and affordable wellness and recreation programs for all generations in the heart of the community. The center represents the first joint venture between Evangelical and Geisinger. The Center was transferred to the joint venture by the Miller family. The YMCA has been contracted to run the day-to-day operations.

- > As of June 30, 2020, the Lewisburg YMCA at the Miller Center had a total of 2,635 members. Prior to the joint venture formation, membership at the facility was 1,620, increasing overall membership by 1,015. A total of 53 members have been granted financial assistance to join the facility.

Action Item 5: Provide regional stability for the provision of emergency medical services in response to growing challenges facing independent volunteer ambulance providers.

- > Evangelical Regional Mobile Medical Services (ERMMS) began operation on October 1, 2019 as a wholly owned subsidiary of Evangelical Community Hospital. Through its collaboration with local municipalities and fire departments, Evangelical provides emergency ambulance service at its ambulance stations in Mifflinburg, Hummel's Wharf, and at Evangelical Community Hospital. ERMMS also provides EMT and Paramedic staff for Warrior Run Area Fire Department, White Deer Township Volunteer Fire Department, Borough of Milton, and Reliance Hose Company.
- > ERMMS owns or staffs five mobile intensive care units, three basic life support ambulances, one medic unit, one non-emergent transport ambulance, and one wheelchair/stretchers van serving Union, Snyder, and Northumberland Counties.
- > Since its formation, ERMMS has responded to 1,000 calls on average per month, including 235 responses to cardiac arrests and standby services for 33 events.
- > As part of ERMMS' commitment to patient care throughout the Greater Susquehanna Valley, a wheelchair van is being introduced to its fleet of service vehicles, addressing a long-standing healthcare transportation gap for the region. This addition will expand services and assist more local residents with transportation needs for medical care.

Action Item 6: Utilize Mobile Health of Evangelical to reach populations that are in areas lacking primary care and health screening options locally.

- > Funded entirely through business and community donations, Mobile Health of Evangelical seeks to improve access to healthcare by overcoming the barriers of transportation, distance, and cost of care. The 38-foot unit features a welcome/registration area, blood draw area, and two exam rooms. Offered services include primary and specialty care, dental hygiene, and health education. Select services are provided free of charge.
- > The Hospital also provides comprehensive health screenings as part of Mobile Health of Evangelical. The following free or reduced-fee screenings were offered in FY2019-FY2020:

Mobile Health of Evangelical	FY2019	FY2020
Comprehensive blood screenings	116	141
Blood pressure/blood sugar screenings	64	87
Heel scan/bone density clinics	49	30
Oral health	NA	17
General Health check-ups	NA	Canceled due to COVID-19

Behavioral Health

Action Item 1: Serve as the County/Regional Centralized Coordinating Entity (CCE) for Snyder, Union, and Northumberland Counties to provide free Naloxone to all First Responders.

- > The Hospital offered 380 Narcan trainings and distributed over 700 opioid reversal kits to various First Responders, community agencies acting as First Responders, and individuals who may need to act as a First Responder.

Action Item 2: Evaluate the usage and effectiveness of the tele-psychiatric program.

- > Evangelical continues to provide tele-psych services for inpatient and emergency department patients. Prior to April 2020, Evangelical provided on average, 11 tele-psych encounters in the inpatient setting and 58 encounters in the emergency department, quarterly. In the last quarter of FY2020, encounters increased to 35 for inpatient and 96 for the emergency department. Average response times for tele-psych services are four hours for inpatient and two hours for emergency department patients.

Action Item 3: Support and participate in the efforts by local opioid coalitions in Snyder, Union, and Northumberland Counties.

- > In late 2018, the Northumberland and Snyder-Union Opioid Coalitions joined forces with the Columbia-Montour Coalition to form United in Recovery. Individually and collectively, the coalitions work to bring diverse organizations and individuals together to educate, change policies, expand access, and improve treatment for opioid addiction. In response to COVID-19, the coalitions established a resource and information website for virtual recovery and basic needs. Evangelical community health and wellness staff serve as representatives on both the Northumberland and Snyder-Union Opioid Coalitions.

Action Item 4: Work to improve and increase access to opioid awareness and education materials and referrals to treatment.

- > Evangelical secured \$653,200 in US Department of Labor National Health Emergency Dislocated Worker Demonstration grant funding for a multi-level approach to educate its entire professional staff about best treatment practices and eliminating stigma related to opioid use disorder. As part of the grant funding, more than half of the Evangelical workforce was trained in Reducing Stigma and Bias, and six clinicians and nurses completed the Chemical Dependency Certification program through the Pennsylvania College of Technology. In FY2019, a Certified Recovery Specialist was embedded in the Hospital Emergency Department to assist with treatment referrals and warm handoffs. As of November 2020, 112 referrals have been made.

Chronic Disease Prevention and Management

Action Item 1: Develop programs and events focused on Diabetes education and prevention.

- > Evangelical offers a free Diabetes Resource Program accredited through the Diabetes Education Accreditation Program of the American Association of Diabetes Educators. Program classes are taught by a Registered Nurse/Certified Diabetes Educator. Covered topics include Introduction to diabetes; Dietary management; Complication prevention; Home blood glucose monitoring; and Medication options. The Evangelical Community Health and Wellness team also developed a programs to address pre-diabetes education.

Action Item 2: Continue to promote and educate the community about a variety of health screenings.

- > Through various screening events and grant funds, Evangelical offered 132 low dose CT scans, 214 mammograms, and 282 iFob screening kits in FY2019 and FY2020.

Action Item 3: Offer a variety of adult and school aged wellness programs aimed to promote a healthy lifestyle and reduce the risk for chronic health conditions.

- > Evangelical's health and wellness programs reached nearly 28,000 youth and adults in the community in FY2019 and nearly 22,000 youth and adults in FY2020:

Health and Wellness Programs	FY2019	FY2020*
Youth educational programs	23,271	20,559
Adult/community educational programs	3,477	792
Worksite wellness health promotion programs	940	636

*FY2020 programming was significantly reduced due to the COVID-19 pandemic.

- > Evangelical knows that staying fit, disease prevention, and necessary intervention are essential tools in helping individuals achieve their health and wellness goals. The Hospital offered a wide range of programs in FY2019 and FY2020, including the following:
 - Freedom From Smoking®: A seven-week session to learn to overcome tobacco addiction with the help of a certified educator.
 - Safe Sitter: A one-day comprehensive babysitting course for children ages 11 and older.
 - Safe at Home: A 90-minute program for students in grades 4-6 that encourages their first steps to independence through instruction in safe habits and preventing unsafe situations.
 - Educational Programs for Children: Free programs with topics that cover nutrition, how to have a healthy heart, Hands Only CPR, the dangers of tobacco products, summer safety, stress management, personal hygiene, bike helmet safety, and online safety.

- Senior Strong: Designed to help individuals age 55 or older live an active, healthy lifestyle, the program includes health screenings, exercise classes, lectures on a variety of health topics, brown bag medicine checks, and other special events and courses designed especially for seniors.
- Childbirth Education Classes: Free or reduced-fee programs with topics that cover prepared childbirth, newborn care, prenatal breastfeeding, and child safety seat inspections.
- Talk With the Doc and Speakers Bureau: Seminars on a variety of health topics.

Board Approval and Next Steps

The Evangelical 2021 CHNA final report was reviewed and approved by the Board of Directors in March 2021. Following the Board's approval, the CHNA report was made available to the public via the Evangelical website at <https://www.evanhospital.com/community-health-and-wellness/community-health-needs-assessment>.

Questions or comments regarding the 2021 CHNA or Evangelical's commitment to community health can be directed to Sheila Packer, Community Health and Wellness Manager, Evangelical Community Hospital at sheila.packer@evanhospital.com.

A large part of being a community hospital is caring for others beyond the Hospital's walls. Evangelical is dedicated to preserving and improving the health of those in our community. We offer information, support, and resources that can help you achieve and maintain a healthy lifestyle. We offer a comprehensive range of programs that can help you assess your current health and provide the knowledge and motivation you need to succeed.

Evangelical is committed to providing exceptional healthcare, accessible to all, in the safest and most compassionate atmosphere possible to build a healthy community. We invite our community partners to engage with us as we provide for the health and wellness needs of the region's residents and define what it means to be the community's Hospital.

Appendix A: Public Health Secondary Data References

- American Public Media Research Lab. (2020). *The color of coronavirus: COVID-19 deaths by race and ethnicity in the U.S.* Retrieved from <https://www.apmresearchlab.org/covid/deaths-by-race>
- 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. (2019). *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. (2020). *National environmental public health tracking network*. Retrieved from <https://ephtracking.cdc.gov/>
- Centers for Disease Control and Prevention. (2019). *National vital statistics system*. Retrieved from <https://www.cdc.gov/nchs/nvss/index.htm>
- Centers for Medicare & Medicaid Services. (2019). *Chronic conditions*. Retrieved from https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main.html
- Centers for Medicare & Medicaid Services. (2020). *National provider identification file*. Retrieved from <http://www.countyhealthrankings.org/>
- County Health Rankings & Roadmaps. (2020). *Pennsylvania*. Retrieved from <http://www.countyhealthrankings.org/>
- ESRI. (2020). *Business Analyst*. Retrieved from <https://www.esri.com/en-us/home>
- Feeding America. (2020). *Food insecurity in the United States*. Retrieved from <http://map.feedingamerica.org/>
- Health Resources & Services Administration. (2020). *Area health resource file*. Retrieved from <http://www.countyhealthrankings.org/>
- Health Resources and Services Administration. (2020). *HPSA find*. Retrieved from <https://data.hrsa.gov/tools/shortage-area/hpsa-find>
- Healthy People 2020. (2010). *2020 topics and objectives – objectives a-z*. Retrieved from <http://www.healthypeople.gov/2020/topics-objectives>
- National Highway Traffic Safety Administration. (2020). *Fatality analysis reporting system*. Retrieved from <http://www.countyhealthrankings.org/>
- OverdoseFreePA. (n.d.). *View county death data*. Retrieved from <https://www.overdosefreepa.pitt.edu/>

Pennsylvania Commission on Crime and Delinquency. (2019). *Pennsylvania youth survey (PAYS)*. Retrieved from <https://www.pccd.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>

Pennsylvania Health Care Cost Containment Council. (n.d.) *Public reports – research briefs*. Retrieved from <http://www.phc4.org/reports/researchbriefs/>

United States Bureau of Labor Statistics. (2020). *Local area unemployment statistics*. Retrieved from <https://www.bls.gov/lau/>

United States Census Bureau. (n.d.). *American Community Survey*. Retrieved from <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Appendix B: Public Health Data Summary

The following table highlights key public health data findings for the Central Region. A “red” finding indicates an area of opportunity, while a “green” finding indicates an area of strength, in comparison to state and national benchmarks. Arrows indicate increasing (▲) or decreasing (▼) trends, as demonstrated in this report.

Public Health Data Summary

	Columbia County	Montour County	Northumberland County	Schuylkill County	Snyder County	Union County	PA	US
Access to Healthcare (2018 CHNA Priority Area)								
Total Uninsured (2014-2018)	4.7% ▼	5.4% ▼	5.9% ▼	6.1% ▼	11.9% ▼	10.3% ▼	6.2%	9.4%
Black uninsured	7.6%	16.3%	9.2%	4.5%	3.3%	4.2%	8.7%	10.8%
Latinx uninsured	1.9%	1.4%	12.0%	15.8%	10.4%	34.8%	14.4%	19.2%
Medicaid insured (2014-2018)	16.6%	16.5%	20.6%	20.5%	15.2%	15.7%	18.9%	20.1%
Primary care providers per 100,000 (2017)	53.1	514.4 ▲	44.6 ▲	55.4 ▼	49.0	94.2 ▲	80.8	75.2
Dentists per 100,000 (2018)	45.8	115.1 ▲	39.5	45.0	49.3 ▲	55.8	69.0	69.0
Potentially Preventable Hospitalizations per 10,000 (FY2019)	112.5	134.3	164.3	181.8	112.4	77.5	150.8	NA
Chronic Disease and Health Risk Factors (2018 CHNA Priority Area)								
Adult smoking (2017)	18.0% ▲	16.1% ▲	19.5% ▲	18.9% ▲	18.0% ▲	17.0% ▲	18.8%	17.1%
Adult obesity (2017)	36.1% ▲	32.5%	39.1% ▲	36.7% ▲	35.2% ▲	29.8%	30.8%	31.3%
Adult physical inactivity (2017)	32.7%	30.5%	26.4%	23.2%	22.2%	19.3%	23.9%	25.6%
Adult diabetes (2017)	12.4% ▲	6.6% ▼	10.3%	11.8% ▲	10.9% ▲	7.5% ▼	9.0%	8.5%
Heart disease death ¹ (2018)	180.4 ▼	126.1 ▼	218.4 ▼	238.5 ▼	167.0 ▲	135.2 ▼	176.1	163.6
Black (2016-2018)	NA	NA	NA	NA	NA	NA	221.1	203.8
Latinx (2016-2018)	NA	NA	NA	NA	NA	NA	109.1	114.0
Cancer death ¹ (2018)	177.7 ▲	177.1	167.9 ▲	192.2 ▲	138.0 ▼	151.3 ▲	156.6	149.1
Black (2016-2018)	NA	NA	NA	NA	NA	NA	192.4	173.0
Latinx (2016-2018)	NA	NA	NA	NA	NA	NA	109.7	108.5
CLRD ² death ¹ (2016-2018)	42.8	46.9	41.6	43.1 ▼	26.6 ▼	24.2 ▼	36.3	40.4

¹ Death per age-adjusted 100,000.

² Chronic Lower Respiratory Disease (e.g. asthma, COPD, emphysema).

Public Health Data Summary, cont'd

	Columbia County	Montour County	Northum- berland County	Schuylkill County	Snyder County	Union County	PA	US
Behavioral Health (2018 CHNA Priority Area)								
Mental health providers per 100,000 (2019)	68.7 ▲	515.4 ▲	35.1 ▲	73.9 ▲	59.2 ▲	134.0 ▲	206.5	250.0
Mental disorders hospitalizations per 10,000 (2018)	96.1	101.4	126.5	117.5	60.2	57.6	88.8	NA
Suicide death ¹ (2016-2018)	17.5 ▲	NA	14.2	25.0	NA	NA	14.9	13.9
Adult excessive drinking	19.6% ▲	19.5% ▲	19.0%	18.9%	19.6%	22.0% ▲	19.2%	19.0%
Opioid overdose hospitalizations per 10,000 (2018)	NA	NA	28.8	22.7	NA	NA	25.1	NA
Maternal and Child Health (All 2018 data)								
Teen births	4.4% ▼	NA	5.8%	6.3%	5.3%	5.0%	4.1%	4.7%
First trimester care	70.5% ▼	64.0%	64.9% ▼	67.4%	60.4% ▼	64.2% ▼	73.9%	77.5%
Black	NA	NA	NA	50.0%	NA	NA	64.6%	67.1%
Latina	57.1%	NA	39.7%	51.8%	NA	58.8%	65.3%	72.7%
Low birth weight	9.4% ▲	5.1% ▼	6.6% ▼	7.6% ▼	4.6% ▼	5.2%	8.3%	8.3%
Preterm births	12.0% ▲	12.7% ▲	7.6% ▼	10.1% ▲	7.2%	6.0% ▼	9.5%	10.0%
Breastfeeding	77.4% ▼	88.5% ▼	75.6% ▼	66.8% ▼	87.7% ▲	88.2%	81.9%	83.5%
Non-smoking during pregnancy	83.0% ▲	89.2% ▲	78.6% ▲	79.7% ▲	87.4% ▲	90.9% ▲	89.6%	93.5%
Aging Population Age 65 or Over								
2+ chronic conditions (2017)	71.9% ▲	70.4% ▲	77.9%	76.0%	79.4% ▲	71.4% ▼	72.2%	68.8%
Alzheimer's disease	10.1%	NA	12.2%	12.4%	10.6%	NA	12.2%	12.1%
Depression	17.4%	18.1%	20.1%	14.9%	20.3%	17.0%	16.1%	15.4%
Diabetes	25.8%	25.6%	30.3%	29.0%	29.5%	24.0%	26.6%	27.4%
High cholesterol	47.5%	43.1%	55.2%	51.6%	62.1%	50.8%	47.6%	43.0%
Hypertension	60.6%	56.4%	66.4%	66.8%	66.7%	58.8%	62.3%	59.9%
Living alone (2014-2018)	13.2% ▲	13.5%	14.5% ▲	14.4%	12.3% ▲	14.7% ▲	12.6%	10.7%
Youth Health								
Obesity (Grades 7-12, 2017-2018)	26.3% ▲	22.3%	26.2%	24.3% ▲	24.4% ▲	20.2%	19.5%	NA
Asthma diagnosis (2017-2018)	9.6%	6.3%	7.8%	5.7%	12.1%	8.1%	11.3%	NA
Sad or depressed most days (2019)	35.1% ▲	NA	38.7% ▼	40.6% ▲	NA	43.3% ▲	38.0%	NA
E-cigarette use (2019)	19.6% ▲	NA	19.6% ▲	23.4% ▲	NA	15.2% ▲	19.0%	NA
Alcohol use (2019)	14.7%	NA	14.2%	17.3%	NA	13.8% ▲	16.8%	NA

¹ Death per age-adjusted 100,000.

Appendix C: Key Informants

A Key Informant Survey was conducted with 77 community representatives. The organizations represented by key informants, and their respective role/title, included:

Key Informant Organization	Key Informant Title/Role
A Community Clinic, Inc.	Administrator
AGAPE Love From Above To Our Community	Executive Director
Allied Services Integrated Health System	Assistant Vice President, In-Home Care
Allied Services Integrated Health System	Director
Allied Services Integrated Health System	Vice President, Home Care Services
Alzheimer's Association	Executive Director
Benton Area Rodeo Association, Inc.	Chairman
Berwick Industrial Development Association	Executive Director
Borough of Lewisburg	Special Projects Coordinator
Camp Victory	Camp Director
Central Susquehanna Valley United Way	Board Member
Coal Region Senior Action Centers	Center Operator
Columbia Child Development Program	Administrator
Columbia Child Development Program Head Start	Family Services Manager
Columbia County Volunteers in Medicine	Executive Director
Columbia Montour Chamber of Commerce	Chairperson
Columbia Montour Chamber of Commerce	President
Danville Area School District	Superintendent
Diakon Community Services	Community Wellness Coordinator
DRIVE Economic Development Entity	Executive Director
Evangelical Community Hospital	Director of Quality, Patient Safety, & Risk Mgmt.
Evangelical Community Hospital	Manager, Community Health and Wellness
Evangelical Community Hospital	President/Chief Executive Officer
Evangelical Community Hospital	Vice President of Medical Affairs
Family Services Association	Chief Executive Officer
Foundation of the Columbia Montour Chamber of Commerce	Director
Geisinger Encompass Health Rehabilitation Hospital	Business Development Director
Geisinger Health Plan	Senior Director, Health and Wellness
Geisinger Health System	Administrative Director
Geisinger Health System	Community Benefit Coordinator
Geisinger Health System	Community Specialist
Geisinger Health System	Director Patient Access
Geisinger Health System	Director Tax Services
Geisinger Health System	Marketing Specialist
Geisinger Health System	Vice President, Health Innovation
Geisinger Jersey Shore Hospital	Associate Vice President, Nursing and Clinic Operations
Geisinger Northeast	Director, Nursing Services

Key Informant Organization	Key Informant Title/Role
Good Samaritan Mission	Executive Director
Greater Susquehanna Valley United Way	President/Chief Executive Officer
Greater Susquehanna Valley YMCA-Mifflinburg YMCA	Director
Harrisburg Area YMCA	Executive Director of Chronic Disease
Lewisburg Borough	Borough Council President/Ward 3 Representative
Lewisburg Borough Council	Ward I representative
Lewisburg Neighborhoods	Director
McBride Memorial Library	Library Director
Middlecreek Area Community Center	Executive Director
MidPenn Legal Services	Coordinated Intake
MidPenn Legal Services	Staff Attorney
Miller Center for Recreation and Wellness	Director, Miller Center Joint Venture
Moses Taylor Foundation	President/Chief Executive Officer
New Roots Recovery Support Center	Outreach Director
Northumberland County Area Agency on Aging	Agency Administrator
Northumberland County Area Agency on Aging	Aging Care Manager 2
Northumberland County Area Agency on Aging	Care Manager
Northumberland County Area Agency on Aging	Center Supervisor/Health & Wellness Coordinator
Northumberland County Children and Youth	Administrator
Penn State Extension	Extension Educator
Penn State Extension	Nutrition Education Adviser
Penn State Extension/Nutrition Links	Nutrition Education Adviser
Pennsylvania Office of Rural Health	Director and Outreach Associate Professor of Health Policy and Administration
Primary Health Network	Executive Director of Behavioral Health
Regional Engagement Center	President
Schuylkill 911	Systems Manager
Senior Center	Center Operator
Snyder County Children and Youth Services	Program Specialist
St. Columba School	Principal
SUMMIT Early Learning	Data & Quality Assurance Coordinator
SUMMIT Early Learning	Family Community Engagement Director
SUMMIT Early Learning	Family Engagement Manager
SUMMIT Early Learning	Site Supervisor
The 1994 Charles B. Degenstein Foundation	Trustee
The Children's Museum	Director
The Exchange	Executive Director
The Northumberland National Bank	Chairman/Chief Executive Officer
Town of Bloomsburg	Mayor
Union County Probation Department	Chief Probation Officer
Union-Snyder Agency on Aging, Inc.	Health & Wellness Coordinator